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ESSAYS, MONOGRAPHS, AND CASES.

A Case of enormous diffused Traumatic Aneurism of the Axilla, from Sub-cutaneous Rupture of the Artery;—Ligature of the Sub-clavian —Repeated Secondary Hæmorrhages from the Wound till the forty-first day after the Operation—Subsequent Suppuration of the Aneurismal Tumor, and Hemorrhage from it—Recovery, &c. By REED B. BONTECOU, M.D., of Troy.

Thos. R. Curran, a feeble man, aged fifty-seven years, badly crippled by rheumatism, came to my office on the morning of October 30th, 1857, with dislocation of the right humerus into the axilla; the accident occurred about ten minutes previously, by falling with outstretched arm on the pavement; the deltoid and axillary regions were so much swollen that I could not detect any cavity under the acromion, nor could I feel distinctly the head of the bone in the axilla. I satisfied myself, however, that there was dislocation, and immediately set about reducing it. The patient was pale, sweating profusely, and faint from pain and internal hæmorrhage. Reduction was easily effected, with very slight extension of the limb, while I held my uncovered heel in the arm-pit. The pain was immediately relieved, but the arm remained as it was when he came in, *perfectly palsied*. The swelling rapidly increased down the arm under the fascia, under the

deltoïd and pectoral muscle, and also downwards under the latissimus dorsi. The pulsation continued in the radial, but I could not control either it or the swelling, by pressure over the sub-clavian. I sent him home, and in a short time saw him, in company with his physician, Dr. Thomas C. Brinsmade. The aneurism was truly enormous; the arm greatly distended from the elbow to the neck, and the shoulder and scapula carried from the chest by a large effusion extending to below its lower angle.

I desired to cut through the anterior wall of the arm-pit, and ligature the vessel at its injured part, but as the sub-clavian could not be controlled, and the effusion had seemed to have reached its limits, it was deemed advisable not then to interfere. Absolute rest was enjoined, and cold lotions ordered to the affected parts. During the five succeeding days, the blood became gradually diffused throughout the right limb and whole of the right side, with infiltration of the neck, so as to obscure completely the sub-clavian. Circulation of the arm was good; temperature natural; arm edematous, and completely paralyzed. The patient was from the first effected with phantomic delirium, and required constant watching, and at times two or three assistants, to prevent him from rising and doing himself injury. On the night of the fifth day after the accident, I was sent for in haste, and found that the patient, in a sudden effort to escape from imaginary robbers, had brought on a fresh bleeding, with great pain, like that experienced when the arm was first injured. The size of the tumor was much increased in the direction of the latissimus dorsi, down to the floating ribs. The patient seemed greatly prostrated, and must have bled largely. I think the tumor at this time contained more than a half gallon of blood. Laudanum, in tea-spoonful doses, was ordered to be given every six hours, together with brandy occasionally, and beef tea as nourishment. I felt that some operative procedure was imperatively called for at that time to save the patient, and a further consultation was had on the sixth, the day following. Drs. A. Watkyns and Lewis meeting us, it was advised to wait. No further noticeable hæmorrhage occurred, and the patient seemed gaining strength, until the fifteenth, when a perceptible increase was noticed in the size of the tumor, and the most prominent part presented appearances of inflammation. On the following day, a further increase in the tumor was detected, and for the first time the aneurismal bruit was heard at the lower part of the anterior wall of the axilla; on the day following, the whizzing was absent; on the twentieth inst., another consultation was held, the gentlemen mentioned above meeting us, which resulted in a de-

cision to tie the sub-clavian. The infiltration of the neck had in a great measure subsided, and the artery could be felt; two o'clock the following day was fixed upon for the operation. The intention was to ligature the artery above the clavicle, if possible, and in case of failure there, to search for it below; the elevation of the clavicle rendering it doubtful if it could be reached above.

Nov. 21st, 2½ P. M. The patient cheerfully laid himself on the table prepared for the purpose, on his back, with shoulders slightly elevated, and with the assistance of Dr. Thomas C. Brinsmade, who continued throughout in attendance on the case with me, and Drs. A. Watkyns, Wheeler, Whiton, Lewis and Seymour, I proceeded to the operation. The patient was put under the influence of chloroform; we attempted to depress the clavicle, but could not. The neck was opened by an incision parallel to, and near the superior border of the clavicle, extending from the sterno-cleido mastoid to the trapezius, and by one perpendicular to it near the posterior border of the mastoid. The superficial jugular was carried to the acromial side of the wound, and the artery fairly exposed after a somewhat embarrassing dissection, considerable difficulty being experienced in passing a ligature under the artery, owing to the depth of the wound, its concealment by the clavicle, and the improper curvature of the needles, a small sharp curve like that of a button-hook being required. A single waxed silk ligature was carried beneath the artery, just at the acromial border of the scalenus anticus muscle. All present satisfied themselves that only the artery was embraced in the ligature. In withdrawing the needle a smart hæmorrhage of venous blood sprang from an acromial vein, which crossed the bottom of the wound, and which was put upon the stretch by the long curve of the needle. I immediately tightened the ligature with my fingers, and the hæmorrhage ceased as the flap was replaced; pulsation in the radial also stopped, and the aneurismal tumor softened and diminished in size. An arterial branch leading to the platysma, momentarily obscured the parts as that muscle was divided. The operation unavoidably occupied about an hour, during which time the patient was under the influence of chloroform, insensible to pain, but rationally conversing with those about him. Wound was dressed with sutures, straps and lint, and the patient made comfortable in bed, the circulation good, and the right arm maintaining its temperature.

The patient was kept on beef tea and good nourishment, with occasionally brandy; laudanum 1 drachm at night; the pulse came down to 60 on the second day after the operation, and a very little

soreness of the wound was all the annoyance he complained of, except the confinement to the recumbent position which was strictly enjoined. The edema of the arm subsided to a considerable extent, and the aneurism became more circumscribed, the contents remaining fluid, but no thrill or pulsation could be detected; pulse, 60; he continued improving, and on the 27th, one week from the operation, the wound had healed, except where the ligature passed out, and from which a small discharge of pus was escaping. Huxham's tincture, with the addition of quinine, was prescribed; the ligature was detached on the 9th day, and the knot found so small as only to admit a fine needle. No untoward symptoms occurred until Dec. 3d, when I found the patient quite weak and exhausted from ineffectual efforts to evacuate his bowels, occasioned, it appeared, by the unusual contraction of the sphincter muscle from fissures and hæmorrhoidal tumors. The straining had caused considerable soreness of the right side of the neck and shoulder, and for the first time distinct and regular pulsations were observed in the right radial since the artery was ligatured. The aneurismal tumor was more tense and there was some soreness about the wound, to which wet cloths were applied. A laxative of nux vom. and aloes was ordered every night; injections were ordered also. On the evening of the 5th he sent for me, as he was suffering very much from ineffectual attempts to void his fæces. I found him sitting on the night stool quite exhausted, and had him at once put to bed on his side, and found on examination a most unyielding contraction of the sphincter still existing, and almost entire paralysis of all the other muscles about the rectum. With a lithotomy scoop and an injection his bowels were unloaded. I regretted very much this circumstance, as the unavoidable efforts made by the patient seemed likely to increase the risk of rupture of the artery or aneurism. Two flabby sprouts from the wound were all that remained unhealed, and from these a few drops of pus kept the dressing moist; a chill also occurred on that evening, but he was bright and cheerful on the day following, and did well until 5 o'clock on the morning of the 7th inst., when he bled from the wound. His daughter controlled the hæmorrhage by a compress until my arrival, when I removed the dressings and found that he had bled only a few table-spoonsful; pulsation in the stump of the sub-clavian and all the great arteries of the neck strong; no infiltration of the neck; a compress with dry lint was applied, and bandages so arranged as to make pressure on the wound; he had made no exertion during the night, and the only circumstance to which it could be attributed was taking an ounce of gin an hour previously. All stimulants were ordered discontinued, and fifteen minims

of tinct. digitalis to be given every two or three hours, until the excitement of the arterial system was subdued. At 10 o'clock he bled again, this time quite profusely; the attendant said the stream came with a noise. Compression had controlled it before I got there. I dressed the wound again, and re-applied the compress more firmly. The patient was pale, and sweating profusely, but composed. 7 P. M., again sent for in haste, bleeding having recurred, but was soon controlled by Mr. Moore, one of my pupils, who had remained with the patient during the day. I removed the dressing, and with Anel's syringe injected into the wound a drachm of perchloride of iron; a slight smarting was complained of by the patient, and the wound dressed as usual. 11 P. M., bleeding again occurred, and I removed the dressings, crowded lint wet in perchloride of iron into the wound, and dressed with straps and compress as before. Dec. 8, 6 A. M., the patient bled again from the wound, and lost perhaps 2 oz. it; was easily controlled by pressure at the right point, and clean dry dressing re-applied. In the afternoon he complained so much of the restraint imposed upon him, that he was allowed to sit up fifteen minutes in bed. Slight bleeding at this time took place, but was controlled as usual. I adjusted a tourniquet, so that firm pressure could be made at any moment. The patient complaining of headache, his digitalis was ordered to be given only once in 8 hours; pulse 64.

9th, 6 A. M., I was called in haste to the patient, whom I found had been bleeding again, but to a small amount; it was easily controlled; he had slept well; felt refreshed, and headache gone. 9 A. M., I dressed the wound, which I found converted into two ulcers, each three-fourths of an inch in diameter; dressed the wound lightly and left off the compress; patient feeling well and hungry, with pulse at 52; he continued cheerful and did well until the evening of the 14th instant, at 10 o'clock, when bleeding again took place from the wound. Being myself absent from the city, Dr. Brinsmade attended to him, and I found him comfortable, on my return, 2½ the following morning. 8 A. M., hæmorrhage to the amount of 2 ounces again occurred, and was arrested by pressure as on previous occasions. At 2½ P. M., another bleeding took place, when I removed the dressing and again injected perchloride of iron, 1 drachm. 6 P. M., the patient had another bleeding, accompanied by severe pain in the wound, of a tearing sensation; dressings removed, and clean ones applied; and at 8½ a repetition of the same, when 2 ounces were lost, and again at 11 P. M., a small hæmorrhage of dark blood.

Dec. 16th, at 3 A. M. A bleeding of 3 ounces occurred, and

was arrested by pressure; great tenderness about the wound was complained of, and swelling and redness from the wound to the middle of the neck. 6 A. M., hæmorrhage again occurred, and was arrested by pressure applied for a few moments; a blush of erythematous inflammation was noticed all over the neck; at 2 P. M., the inflammation had extended to the opposite side of the neck, and down over the pectoral muscle to the axilla; at 11 P. M., the inflammation had further extended in all directions, and had the appearance of erysipelas; pulse was 75; wet cloths were kept applied to all of the inflamed surface, and to the left eye, of which he complained much. I found on the following day that the ulcers, at the site of the original wound, were converted into one large ulcer, with ragged edges and angry appearance. The inflammation of the neck rapidly subsided, and the ulcer improved with the wet dressings, which were agreeable to the patient and were continued; the patient was kept under the influence of digitalis. Tint. ferri. chloridi was added to his medicines, to be taken three or four times a day; the wound was occasionally dusted with tannin, or touched with sulph. copper, and was contracting under these applications.

Everything went on well until the 20th, at 6½ P. M., when I was summoned to the patient in haste, and found him bleeding profusely; his daughter, a young woman of unusual intelligence and firmness, was unable this time to arrest it. I instantly removed the dressing and injected 1½ drachms of perchloride of iron, and crowded in dossils of lint wet in the same. Compression by bandage was again resorted to, and the digitalis resumed in five-drop doses, it having been discontinued the day previous, his pulse being at that time only forty-eight per minute. I left him cheerful, and was summoned to him again at six the following morning, when I found he had bled some eight or twelve ounces; the irritation of the wound from injections and pressure was so great that pressure only for a moment could be borne; wet dressings were ordered, and seemed grateful to the patient, who continued improving in every respect till the 25th instant, about eight A. M., when he bled some ten or twelve ounces. It occurred during sleep, and might have proved fatal had not his attendant fortunately discovered it. The patient was greatly annoyed at this accident; wound was dressed with dry lint and straps; citrate of iron was ordered in place of the muriated tincture. The patient rallied and continued gaining strength, and improving in every respect till the morning of January 1, 1858, when he bled for the twentieth time from the wound in the neck; it had flowed rapidly, and eight or ten ounces

were lost. On my arrival I immediately removed the dressing, and injected into the bottom of the wound two drs. of Pagliari styptic, for the preparation of which I would refer those interested to the British and Foreign Medico-Chirurgical Review, October, 1852, page 555. I used this at the suggestion of Prof. W. P. Seymour, who had seen the patient with me. The wound was dressed with straps and dry lint, and a compress sunk well behind the clavicle, where it was retained until the 6th instant, when I was obliged to discontinue it on account of a threatening abscess below the clavicle. The arm had been very much swollen since the use of the hard compress, which seemed to interfere with the returning blood in the sub-clavian vein. On the 13th the digitalis was wholly discontinued, and ale and liberal diet allowed. On the 15th the general condition of the patient had greatly improved, the wound in the neck had contracted to the size of a dime, and was healing. Continued to dress it with lint and straps, and occasionally stimulating it. Slight redness and tumefaction of the integuments covering the aneurismal tumor was discovered at this time, accompanied with tenderness and an appearance of suppuration. I might add that the aneurismal tumor had become quite small, and seemingly disconnected from the axilla. It was situated about midway between the crest of the ilium and the arm-pit, and under the edge of the latissimus dorsi. On the evening of that day the patient was attacked with a harassing cough, without expectoration and pain, referable to the tumor, which looked quite red and painful. Laudanum was administered for the cough, in teaspoonful doses, and wet dressing applied to the side. The tumor continued enlarging, reaching from the axilla to the ilium, and much inflamed; and on the 19th, fluctuation being distinct, I explored it with a fine trocar, and found pus. The opening was then enlarged and the contents evacuated, consisting of pus, mingled with fragments of old clots of blood. Six ounces were taken at this time, and a poultice ordered applied. The opening was purposely left valvular, (fearing hæmorrhage from the axilla,) and did not discharge spontaneously, but was evacuated twice a day by a grooved staff. The abscess increased in size considerably, and on the 29th I opened it freely at a more dependent point, from which it discharged without assistance.

On the evening of the 30th, a hæmorrhage from the abscess occurred through the old opening, to the amount of four ounces. A large sponge was substituted for the poultice, by which an equable pressure was maintained over its entire surface. No further bleeding occurred; the abscess rapidly contracted; the discharge diminished;

wound in the neck healed, and the patient very much improved in health; seemed in a fair way to recover, when on Feb. 7th his condition suddenly changed, exhibiting great feebleness and a jaded look; the wound of the neck reopened and discharged pus; the abscess of the side enlarged to a fearful extent, its walls crumbling on every side, and discharging an increased quantity of fetid matter, with fragments of sloughing tissue and clots. The abscess had burrowed downwards so as to necessitate an opening in a more dependent part. Great lameness of the right side and shoulder was complained of for three or four days; arm swollen and edematous; circulation fair; pulse 85; patient pale and weak; brandy in addition to his ale was allowed, and the doses of quinine and Huxham's tincture increased, and ordered every six hours. Feb. 8th, patient appeared rallying somewhat; the abscess was painful and not discharging well from the openings. I introduced a piece of elastic catheter, perforated on all sides, over this the large sponge, covered with oil silk, as a substitute and improvement on the poultices; pulse 80; general condition improved.

Feb. 9th. The sinus in the neck, apparently an inch and a half in depth, and large enough to admit a pea, was still discharging some pus; dressed it with sponge tent, and the whole neck covered with wet cloths, as there was some fullness above the clavicle, accompanied with a flush of redness and heavy pulsation of the great vessels; the sinus in the neck healed, and a gradual improvement in the general condition of the patient was not interrupted by anything worthy of remark until the 18th inst., when another opening became necessary in the abscess of the side, it having burrowed near to the ilium.

March 1st. Found the old abscess still discharging, but to a trifling amount, comparatively, and its dimensions much contracted. At this time a new abscess was detected in the arm, lying along the course of the brachial artery from the lower third to the axilla, suppuration of the remaining clots in these situations evidently taking place, and discharging itself into the abscess of the axilla and side when the patient assumed the recumbent attitude. I applied a roller carefully to the whole arm, which continued swollen and edematous when allowed to hang by the side.

April 3d. Swelling and inflammation of the axilla, which had been for some days manifesting itself, resulted in an abscess, pointing in the apex of the axillary space. I opened it near the posterior fold, and it discharged pus and clots of blood freely; the old abscess discharged very little after this, and the patient continued to improve in every respect until the 9th inst., when, after some inflammation about

the neck wound, it reopened, and continued discharging a small quantity of pus daily. On the 15th inst., under the care of Dr. Seymour, the patient suffered a hæmorrhage from the wound of florid blood to the extent of some ounces. Pagliari's styptic was used as before, about two drachms being injected, and no further hæmorrhage occurred; the patient's health seemed unaffected by this last accident, and he continued steadily to gain flesh and strength. The next note of the case, April 8th, reports the general condition of the patient good and improving, the abscess in the arm pit being the only one discharging. Sloughing of the loose tissue in this situation had occurred, and masses of considerable size were assisted away occasionally with the forceps.

April 10th. The evidences of suppuration along the course of the brachial artery, which had existed for some time, now threatened to make an opening near the elbow joint; this was opened by Dr. Brinsmade, (who was in attendance on the case during my illness,) and, after discharging freely for a few days, closed; soon after this the opening in the axilla healed, and on the 20th of April the extensive surface so long undermined by abscesses seemed quite sound, and has since so remained.

The paralysis of the right arm had remained complete for four months from the date of the accident, both as regards sensation and motive power; and the first indication of returning sensibility manifested itself in the integuments covering the deltoid, and slowly crept down to the elbow, where it seemed arrested for some time; but during the months of June, July and August, the usefulness of the hand and fore-arm was almost perfectly regained.

I have no doubt that the brachial plexus of nerves was torn across at the same time that the axillary artery was lacerated by the dislocation of the humerus.

The arrest of hæmorrhage in this case was, I think, owing more to well-directed pressure than to any other means used. During the first fifteen days after bleeding from the wound occurred, its condition was such that an adequate amount of pressure inflamed the parts, enlarged the ulceration, and was insupportable. After the 20th inst. the wound had so far healed, that I was able to place a small, hard, cylindrical compress of linen posterior to it, and parallel to the clavicle, lying obliquely across the sub-clavian, at the point ligatured. A compress of linen two inches square, and half an inch in thickness, was laid on this, not allowing it to come so far forward as to touch the clavicle; surmounting this was placed a crescent-formed piece of steel, with its convexity resting downwards on the compress, and over this

an elastic suspender, secured to a girth about the chest. Thus I was able to concentrate a sufficient degree of pressure down behind the clavicle, without touching that bone, which was thinly covered by integument, and constantly inflamed. The greatest watchfulness could not, however, prevent slight displacement of the compressing bandage, and hence the hæmorrhages which followed.

The interesting features of the foregoing case may be summed up as follows :

The novel manner in which the aneurism was produced. Its large dimensions elevating the clavicle, and rendering the operation difficult. First distinct pulsation in radial detected twelve days after the operation. Separation of the ligature on the ninth day after the operation. Secondary hæmorrhage sixteen days after the operation, and nine days after the separation of ligature. The repeated recurrence of hæmorrhage during twenty-six days. Extensive inflammation of the neck from pressure. The inefficacy of perchloride of iron as a styptic. The suppuration of the sack and hæmorrhage from it. The almost complete loss of sensibility and motive power in the arm, and the extensive suppuration of the arm, axilla, and pectoral region.

*Milk—The estimation of its Commercial Value and Adulterations.**

With the aid of the valuable monographs, whose names are given below, we do not propose to write an article which shall be solely designed for those who cultivate chemistry as amateurs, but to present what, in our view, may answer as the best and surest mode of determining the value of the milk which the dealer furnishes our families, morning after morning. If a system for determining the value of milk is to be useful in a community, it must be so simple, that any man of ordinary acquirements and moderate carefulness can employ it. The head of the family

**Instruction pour l'essai et l'analyse du Lait, par M. Bouchardat, et feu T. A. Quereau. (Extrait du Repertoire de Pharmacie, Juillet et Aout, 1856.)*

Notice sur le Lait, les falsifications qu'on lui fait subir; instructions sur les moyens a employer pour les reconnaître; par MM. A. Chevallier et O. Reveil. Paris, chez M. Salleron, 1856.

Instructions pour l'usage du Galactomètre centésimal et du Lactomètre, instruments propres à faire reconnaître la pureté du lait des vaches; par H. Dinocourt. Paris. Imprimerie d'Alexander Baillly, 1856.

Adulterations detected in Food and Medicine. By Arthur Hill Hassall, London: Longmans, Brown, Green, Longmans & Roberts, 1857.

is, in most cases, not able to call in the aid of a chemist for the examination of milk, and it is much to be desired that he should be able at a small expense to obtain such apparatus as may give him the means of examining the article for himself. A quantitative chemical analysis is undoubtedly the surest mode of getting the absolute value of milk, but this is not available for ordinary use; and besides, it requires an amount of time which would make it useless for practical purposes. Hence we are obliged to resort to the use of instruments for quick determination which may give us very close, approximate results.

The quality of milk for family use does not depend alone upon the amount of cream it contains, nor upon the casein, but upon these along with the relative amount of water and sugar. We shall devote ourselves, then, to the methods for determining the amount of water, casein, sugar, and fatty matter in milk.

Water.—The quantity present determines to a great extent the specific gravity of the milk. Ordinarily this is 1030, but it may range between 1026 and 1031, without any fraudulent addition of water to the milk. The specific gravity may be determined in several ways. The most troublesome of all these is probably the employment of the Sp. Gr. bottle—and the most convenient the use of some form of the hydrometer. One of the latter has been prepared with the view of determining at a glance the amount of water present. The instrument is made so as to sink nearly its full length in pure distilled water, and is marked at this point 0°. The scale is divided into 25 degrees, counting downwards, 20° being the point to which the instrument would sink in pure Orange Co. milk; 15° indicates three-quarters milk and one quarter water; 10° half milk and half water; and 5° one quarter milk and three quarters water. This instrument could only give comparatively correct information when the milk was *unskimmed*, as skim-milk really gives a higher specific gravity than that which has not been deprived of its cream. Hassall says, "if the cream be either in part or wholly removed from milk, the residual milk will weigh heavier than that which contains its normal proportion of cream. Skim-milk tried by the scale adapted for pure milk would give a higher specific gravity than ordinarily belongs to pure milk, and hence the error might be committed of supposing it to be pure. * * * Again, if to such skim-milk we add a certain per centage of water, we restore it to its proper specific gravity, and therefore this milk would show * * * the density proper to pure milk, and hence this fraud would escape detection." This fact shows us that we dare not rely alone on the specific gravity. In such a case we are necessitated to employ an instrument to deter-

mine whether the cream has been removed or not, so as to aid us in our estimate of the value commercially of the milk. Before, however, describing the principle of the lactometer or creamometer, let us direct the attention of our readers to an excellent form of *hydrometer* for determining the specific gravity of milk, whether creamed or not; we refer to that called the centesimal galactometer of Mons. Dinocourt, manufacturer of physical apparatus, 9 Quai St. Michel, Paris.

Like ordinary hydrometers, the centesimal galactometer consists of a tube containing the scales, a cylinder serving to float it, and an olive-shaped bulb, filled with shot or mercury, to act as ballast in keeping the floating instrument in a vertical position. Of these three parts it is only necessary to describe the scales. (Fig. 1.) First, then, the scale marked A, which answers for the determination of milk that has not been deprived of its cream. "The first degree above is marked 50, and those below it from 50 to 100 and over. Each degree starting from 100 in mounting up to 50, represents a hundredth of pure milk. To comprehend well the value of the degrees of this scale, it is sufficient to give an example: supposing, then, that the galactometer is sunk to the 85th degree, that will indicate eighty-five hundredths of pure milk, and consequently that fifteen hundredths of water had been added to this milk; if the galactometer is stopped at 60 degrees, there will be forty hundredths of water or four-tenths of water added. We see that, by adding to the number of

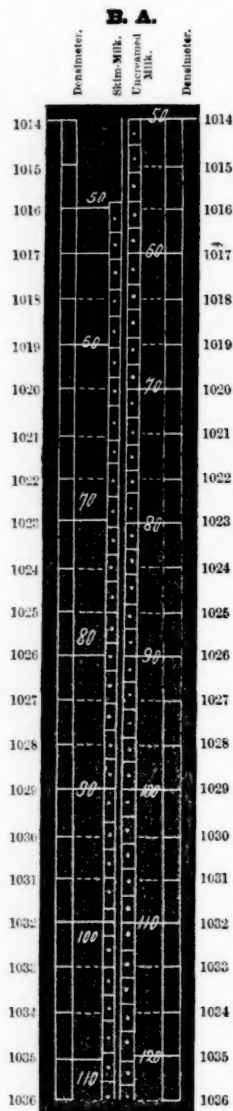


FIG. 1.—THE SCALES OF DINOCOURT'S CENTESIMAL GALACTOMETER AS COMPARED WITH THE DENSIMETER OF MONS. COLLARDEAU.

*hundredths indicated by the instrument a complementary number to form one hundred, this complementary number will give in hundredths the quantity of water added to the milk under trial. * * ** The space comprised between 100 and 120 comprehends the different densities of pure milk—that is to say, *without the extraction of cream, as well as without the addition of water;* and the scale has been prolonged so as to serve every possible case."

The scale B, is constructed for weighing skim-milk, and the same principle precisely has been employed in its construction. Every degree from 100 up to 50 represents a hundredth of pure skim-milk, and the estimation of the amount of water added is precisely the same as with milk that has not been creamed.

These scales give the value of milk only in hundredths, "nevertheless it will always be easy to compare these degrees with the density or *specific gravity of the milk*. It is known that by the word *density*, in physics, is meant the specific weight of any liquid whatever, water being taken as a 1000, a litre of distilled water weighing 1000 grammes or 1 kilogramme at the temperature of 4° C. If we wish to know the density of the milk under test, we will recollect that 50 degrees of scale A, of the galactometer, corresponds exactly with 1014 of Collardeau's densimeter, (at 15° C.,) and that every tenth of the scale of the galactometer is equivalent to 3 degrees of the densimeter, and consequently three hundredths and a third are equal to a degree of that instrument. Thus 1014 corresponds to 50; 1017 to 60; 1020 to 70, &c."

Two things are necessary to make the determinations of Dinocourt's galactometer valuable, viz., a knowledge as to the character of the specimen, whether it has been deprived of its cream, and its temperature at the time of the test.

The character of the specimen is determined by the use of the lactometer, an instrument consisting of a long tube divided into 100 parts, from above downwards, intended to indicate the per centage of cream present. The milk is well stirred, so as to produce perfect admixture of the milk with the cream, and then poured in the tube until the zero point is gained. It is then placed in a cool place twenty-four hours, when the per centage of cream can be readily recognized by the difference of color in the contents of the tube.

The scales of the galactometer are constructed for the temperature of 15° C., (about 59° F.,) and if the milk is at that temperature the indications of the galactometer will need no corrections; but if it be above or below that, the *apparent* degrees will need corrections, which

are easily made by the aid of tables that accompany Dinocourt's instructions for the use of his instruments.

So far, then, as these instruments go, they furnish very valuable determinations. But it will be observed that they only indicate the amount of cream and water present in milk, giving us no information as to the quantity of sugar and casein that may be present, which principles certainly are of great importance in a hygienic point of view. And without dwelling upon other instruments and methods of examination, such as Donne's lactoscope, Quevenne's lacto-densimeter, Vernois and Becquerel's hydro-lactometer, we will direct attention to the simple contrivances which Chevallier and Reveil propose for the determination of the presence of the four important constituents—*water, casein, sugar, and fatty matter.*

The apparatus necessary for a commercial analysis of milk is all neatly arranged in a portable case, to be had of Salleron, No. 1 Rue de Pont de Lodi, Paris; and consists of reagents, burette, &c. It may be considered as composed of two parts, one comprising everything necessary for the determination of the sugar, and the other for the estimation of the other principles.

The quantity of sugar should first be determined, and the process is as follows: The milk having been well shaken so as to form a homogeneous mass, is then poured (about 80 grammes) into a porcelain capsule, and heated to ebullition over a spirit lamp. To the boiling milk is added three or four drops of sulphuric acid, to be thoroughly mixed with it by means of a glass stirring rod. As soon as coagulation has been effected, it is thrown upon a filter and the whey received in a beaker-glass. If the liquid comes through turbid, it is to be thrown again on the filter. The clear whey is to be cooled down to about 15° C, by plunging the vessel in cool water. During the cooling 20 cubic centimetres of a solution of *potassio-sulphate of copper* (the liquor of Fehling*) is then poured into a glass balloon along

* The solution of potassio-sulphate of copper, recommended by Chevallier, differs somewhat from that of Fehling, and is made according to the following formula:

Pure crystallized sulphate of copper...	40 grammes.
Distilled water.....	160 "
Caustic soda	150 "
Caustic potassa	100 "
Distilled water.....	500 "
Neutral tartrate of potassa.....	160 "

To prepare the liquid, the sulphate of copper is to be dissolved in the smallest

with a like quantity of water. This liquid is heated to boiling, over a spirit lamp. Of the cooled whey 20 cubic centimetres are taken and mixed also with 20 cubic centimetres of water, and of *this mixture* 20 cubic centimetres are taken with the burette and poured drop by drop into the boiling potassio-sulphate of copper mixture, the process being carried on carefully until the liquid acquires a beautiful brick-red tint, without the presence of any blue or violet discoloration. Having accomplished this, we shall find that the supernatant liquid becomes colorless or of a slight yellowish tinge, the red precipitate quickly subsiding. "We can now read on the burette what was the quantity of the whey employed for the destruction of 20 cubic centimetres of the blue liquid, and each division of the burette corresponds to *one gramme of lactine in the litre.*" Thus, if the mark of the liquid in the burette is 55, the specimen of whey operated upon would contain 55 grammes of sugar in 1000 grammes of milk. It is rare that the sugar of milk is present in greater proportion than 58 parts in 1000 of whey, or less than 50. Chevallier and Reveil consider "*every specimen of milk whose whey gives less than 53 thousandths of sugar as adulterated.*"

This process for the estimation of the sugar can be employed on milk itself, but as the sources of error are greater, "*it is necessary to consider that every specimen of milk which gives less than 49 thousandths of sugar is adulterated with water.*"

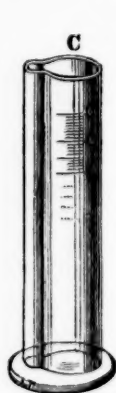
The following Table shows the amount of water added to milk, as indicated by the quantity of sugar present in thousandths:

quantity of water possible, (160 grammes,) the tartrate of potassa is then to be dissolved in water and mixed with the other solution, and finally the solution of soda and potassa is to be added. Sufficient distilled water is then to be added, so as to make the quantity of the liquid 1155 cubic centimetres at 15° C.

The copper contained in 20 cubic centimetres of this liquid should be reduced by 0.134 of lactine. It is necessary whenever this liquid is prepared to test it by experiment, as at times the exact titration can only be accomplished by the addition of water or sulphate of copper.—*Jour. de Chim. Med.*, ii., 301.

WATER.	MILK.	SUGAR.	WATER.	MILK.	SUGAR.
100	—	—	45	55	30.8
95	5	2.8	40	60	33.6
90	10	5.6	35	65	36.4
85	15	8.4	30	70	39.2
80	20	11.2	25	75	42.0
75	25	14.0	20	80	44.8
70	30	16.8	15	85	47.6
65	35	19.6	10	90	50.4
60	40	22.4	5	95	53.2
55	45	25.2	—	100	56.0
50	50	28.0			

The density of the milk and the amount of the cream is then determined by the employment of three instruments, the galactometer



(A), thermometer (B), and creamometer (C); (Fig. 2.) The first is a densimeter, with a double scale, adapted both for pure milk and skim milk, the divisions being precisely the same as those employed in Dinocourt's instrument. The second is an instrument containing alcohol, colored red, and is intended to be placed in the groove of the creamometer. The latter is a test glass, with groove at side for thermometer, whose capacity has been divided into 100 parts, although but 20 divisions are marked, as milk will never contain a

larger quantity of cream than this. These three instruments are made very neatly, so as to occupy but small place, and in beauty and convenience are far superior to Dinocourt's. The determinations of the galactometer require corrections, in case the thermometer should show a temperature above or below that of 15° C, for which purpose Chevallier and Reveil, in their instructions, present a set of admirable tables.

By way of resumé, we may transfer the following from the authors of this method of examination:

"The pureness of milk may be easily recognized by a union of three methods:

1st. Determination of the quantity of sugar it contains.

2nd. Its *real* density; that is to say, the density after the correction of the influence that a more or less elevated temperature could exercise on this density.

3d. The determination of the proportion of cream."

Every specimen of milk should be considered as adulterated, whenever:

1st. Its whey contains less than 53 thousandths of sugar, or when the milk itself furnishes less than 40 thousandths.

2nd. When the milk, whether creamed or not, furnishes with the lactometer a *real* degree less than 100.

3d. When the milk furnishes less than 8 per cent. by the creamometer.

The plan of operations proposed by Chevallier is so simple that it can be readily mastered by any one, either with or without a knowledge of the practical details of chemistry. And since it is unlikely that our cities will create inspectors of milk, with sufficient chemical knowledge to give a thorough analysis of the article, it is proper that the method of making a close approximate analysis should be rendered so simple that any one could apply it.

We have said nothing about the supposed additions of chalk—a very rare adulteration—sugar, starch, &c. These are but infrequently employed in this country. We have most to complain of being furnished with skim milk instead of pure milk, or milk that has been largely watered instead of that which the milkman has obtained directly from the cow. If we can obtain milk from cows that have been fed on nutritious food, without admixture with the fluid that the pump—the cow with the iron tail—supplies, we need have very little fear of the presence of such impurities as the timid may imagine have been added by the milkman.

L. H. S.

Accidents resulting from Arsenic to the Workmen in the Hartz Mines.
By DR. BROCHMANN.

The kind of work which brings the laborers in the mines of the upper Hartz in contact with arsenic, occurs at the silver foundry of Saint André, and consists in the roasting of the arseniferous ores, the sublimation and collection of this metal, or rather of its oxide, which, after a second sublimation is packed up in casks. These operations,

although simple, expose the workmen to the action of the vapors and the dust of arsenic, in the condition of the sulphide or oxides, and this is done with the greatest ease, since three times a week twenty-four hours are devoted to the work. Whatever may be the cause, we have not observed, in the men devoted to these occupations, derangements of health as serious and as frequent as we would have supposed, which makes it necessary to attribute it to the different prophylactic means which are used by them. Of the latter may be considered the custom of working with a sponge placed before the mouth, and of putting on thick clothing so as to prevent the metal from coming in contact with the skin.

As regards the *diseases* engendered by arsenic, Brochmann observes that acute poisoning is very rare. The cases reported in the mines are exceptional. Nor does he find examples of chronic poisoning more numerous, unless we wish to give this name to moderately severe diarrhœas, and to a peculiar tendency to the saturnine influence, although this fact, even, is not demonstrated.

The most common effects of the arsenic consists in an irritant action on the schneiderian membrane, occasioning sneezing, epistaxis, stoppages of the nasal fossæ, or on the mucous membrane of posterior fauces, from which anginous affections result. But the most frequent and troublesome lesions displayed themselves on the skin. In the first stage there is a swelling of the face; at an advanced stage erythema (*paratrimma*) appears, which is most usually observed in the inguinal region, then in the axilla, and about the articulations of elbow and knee. This eruption degenerates rapidly into ulceration. The most frequent, obstinate and troublesome consequence is a papular exanthem, which appears either on the face, in the axilla, on the hips, or in the articulations of the knee or elbow, occasioning violent itching, and continuing sometimes for a year, even after the workman has ceased from this work. Whatever it may be, the eruption never gives rise to any marked derangement, and never degenerates into a more serious affection. Under any form, the arsenical intoxication produces always fewer grave disorders than the saturnine. Experience has shown that it has not shortened the existence of the laborers. Prognosis is hence much less serious. Nevertheless it is proper to watch carefully lest these affections, always simple when the habitual precautions are employed, should be aggravated by negligence.

The treatment of the slight forms of arsenical intoxication just described do not demand any very serious attention. The irritation of the mucous membrane and the skin yield promptly, as an ordinary

thing, to emollient and cooling topical applications, if it is not supplied with continual food for its preservation through the renewal of the cause. When the affection is inveterate, and due to long continued action of the arsenic, it is proper to conjoin with the local applications the general treatment for arsenical poisoning. Hydrated oxide of iron is recommended, although Dr. Blum, physician at the mines, advises long continued use of magnesia.

In order to protect the workman from the arsenical emanations and powder, it is recommended that a sponge be worn before the mouth, that fatty food be employed, and great care as to cleanliness, and with a view of being prepared for acute poisoning, a bountiful provision of the hydrated sesquioxide of iron is kept on hand.

It is well to append to this article of Brochmann's, M. Imbert Gourbeyre's general table of diseases of the skin produced by arsenic.

1st. *Pelechiol eruptions*, or *ecchymoses*, noticed by Schulze, Léod, Hahneman, and Christison; they seem to effect the trunk and genitals. 2nd. *Papulous eruptions*, which attack, by preference, the elbow and face. 3d. *Urticaria*, (Fowler, Hahneman, Orfila,) very frequent. 4th. *Vesicular eruptions*, (Boerhaave, Barrier, Guilbert, Hahneman, &c.) 5th. *Erysipelatous eruptions*, (Desgranges, Schulze, Spengler.) 6th. *Pustular eruptions*, (Christison, Orfila, etc.); these have been compared to variola; they terminate in crusts or ulcerations, and leave cicatrices. 7th. *Ulcerations*, (Guilbert, Hahneman, Schulze, Christison, Orfila,) these have been noticed on the head, the limbs, scrotum, tongue, lips, and throat; they seem to originate in pustules, which readily break, and give rise to ulcerated surfaces. 8th. *Gangrene*, (Bachman, etc.) often noticed about the genitals.

L. H. S.

Tepid Injections in the treatment of Non-congenital Phymosis of Infants.

By WILLIAM C. ROGERS, M.D., Green Island, Albany Co., N. Y.

I have been uniformly successful in treating the non-congenital phymosis of infants, depending upon an accumulation of the secretion of the *glandula tysoni* within the prepuce, by tepid injections repeated two or three times a day *pro re nata*.

By cautiously introducing the point of a glass ear syringe, previously oiled, within the orifice of the swollen and infiltrated prepuce, and by making gentle pressure upon the same in such a manner as to steady the instrument, and reduce still further the orifice of escape for the contained and injected fluids, I have in many instances washed out

from about the glans penis a large quantity of milky secretion, in some cases entirely fluid, and in others consisting of numerous crusts or scales floating in thick puruloid mucus. The removal of the cause, the acrid secretion, has been invariably followed by a subsidence of the disease, and in no single instance have I been compelled to use the injections more than three times before the cause was entirely removed.

I find no mention of this form of this affection in any of the standard works, and of course nothing on the subject of its treatment, and therefore lay the above before the profession, who will take it at its worth, and treat it accordingly.

REVIEWS AND BIBLIOGRAPHY.

Researches on Primary Pathology and the Origin and Laws of Epidemics. By M. L. KNAPP, M.D., &c., &c. 2 vols. Published by the author.

These volumes, each of which contains somewhat over three hundred pages, consist of a series of papers in a manner independent of each other, and yet all bearing upon the same subject and tending to illustrate the same idea.

The first volume contains a paper on "the discovery of the cause, nature, cure and prevention of epidemic cholera;" another entitled an "inquiry into the nature of the nursing sore mouth affection;" and an "essay on cholera infantum." The second volume is a "treatise on the scorbutic diathesis."

The mottoes upon the title page of these volumes indicate the aim of the author; one being given thus, in Latin, as from Hippocrates: *Morborum omnium unum et idem modus est, locus autem differentiam facit;* and the other from Rush, commences—"There is but one fever." The author's doctrine, which runs through all of these papers, and is especially developed in the second volume, is, we believe, fairly stated thus, in his own words: "The scorbutic condition is the primary pathological state."

Now, we at once state our opinion, that the evidences for the theory of the unity of disease, or of its one origin, have seemed, whatever has been their source, to be very incomplete, and supported by arguments which are not borne out by logic. Generalization is a very

good thing, and to be commended, but when carried to excess, is as dangerous as its opposite. *Ne quid nimis* ought always to be ringing in the ears of those who attempt to construct theories, or in fact, to lead in any particular direction in the science of medicine. For want of this check, many of the vagaries of medical doctrines have arisen and prevailed, to be succeeded, too often by other and equally erroneous doctrines. Absolute solidism, absolute humoralism, are illustrations of the general error in this respect, while the absolute confidence of some persons in the microscope as a means of diagnosis, and the absolute distrust of it by others, illustrate the same tendency in individuals. In none of these generalizations upon the cause of disease, when that cause is sought as a unit, is logical reasoning adhered to. One or another element is wanting to complete the syllogism. Hahnemann was an ingenious advocate for the unity of the cause of disease, and his "itch" theory is as well supported as any other having a similar aim. But it is not true, as is now freely admitted by his most intelligent followers.

Dr. Knapp's theories are no better supported, manifesting as they do, the same logical deficiencies. It is not a little praise to say that it is no more marked by such deficiencies than those of his predecessors, in what we believe to be the vain attempt to bring all disease to a common origin. The following passage from the second volume of the book under consideration, will enable us to illustrate our meaning within the space at our command. Under the title of illustrations from the chemistry of medicines, we have this anecdote:

"Travelling in the stage (coach) from Louisville to Bardstown, in February, 1856, we met with a Mr. Wright, who resides four miles south of Louisville, having married into the Doup family, noted as horticulturists' and fruit growers for the Louisville market. He stated a remarkable fact, viz., that his child, now an infant, can look upon an unbroken line of living ancestors to the fifth generation. Its parents, grandparents, great-grandparents, and great-great-grandparents, are all living and growing vegetables and fruits for the Louisville market! What a commentary on the benign influence of a vegetable and fruit dietary." (Vol 2, p. 76.)

The syllogistic statement of this is, 1. In the Doup family there are living representatives of five generations. 2. The Doup family grow fruits and vegetables for the Louisville market. 3. Therefore, a vegetable and fruit dietary is promotive of long life. Very clearly, this argument is faulty, and to say the least, has no logical support. Did the Doup family *live* chiefly on fruits and vegetables, for that does not

follow from the fact of their *growing* them. Were there not other causes for their longevity? Is it in fact, certain that they are long lived, for this succession may have been, and it seemed to us probable, that it was chiefly the result of a series of early marriages; for a little calculation will show that this series of generations may exist and the oldest of the individuals not have gone beyond four-score years.

This quotation is not given from its inherent and peculiar weakness, but to enable us to illustrate what we esteem the radical defects of the book, namely, its reasoning is not logical, and that it therefore fails to convince the reader. To go carefully through the volumes and point out the defect wherever it exists, cannot be done within limits proper for these pages.

From these objections it is most agreeable to turn to the consideration of the therapeutic teachings of Dr. K.'s papers. These we believe to be of great value, and especially those which concern the treatment of "nursing sore mouth," and of that compound of diseases called "cholera infantum." Of both these diseases it has been our fortune to see a large number of cases, and we can heartily join with Dr. K. in his denunciations of the methods frequently adopted in their treatment. Of nursing sore mouth, for instance, the argument has not unfrequently been used, that it is an inflammation, a stomatitis, and therefore, to be combatted by antiphlogistics. It is true that patients do live sometimes, when submitted to such treatment; but it is in spite of—not in consequence of it. The disease is one of impaired nutrition, of debility, if you choose the expression; at any rate, of a condition below the level of health, and requires for its cure astringents locally, and tonics, stimulants, good diet, and good air for their general effect. For these reasons, Dr. Knapp declares it to be scorbutic in its character—and so far as this disease is concerned, we incline to agree with his teachings. Confine a pregnant woman to a diet of bread, salt meat, tea, coffee, and only occasional or limited use of fresh meats, succulent fruits and vegetables, and shut her up from the fresh air, and she is clearly in a most favorable state for becoming scorbutic. Yet, it will be found that women are frequently so limited in those regions in which nursing sore mouth prevails. Its very rare occurrence in New York, is doubtless due in a large measure to the varied diet, the abundant supply of fresh meats, fruits and vegetables, and the sufficient exercise, which are easily obtained by all who are in this condition. To continue the use of a varied diet till the time of confinement, and to walk or ride out daily, till the last moment, is the rule with almost, if not quite all of those who pass through their period of confinement and

nursing, with the most complete success; provided, that these be resumed at the earliest possible moment after delivery, and its other immediate perils are passed. While contending with a general tendency among women to this grave difficulty, we have been uniformly most successful when we have resorted to such hygienic treatment.

As there has been some question made concerning Dr. Knapp's cases, and the suggestion ventured upon, that they were not veritable nursing sore mouth, we have quoted in full in our August number one which seems to be typical. We had also the farther purpose of doing justice to his method of treatment by allowing him to state its particulars in his own words. In our own experience, we have repeatedly met with cases in which such articles of diet as those mentioned could not be borne in the mouth without producing very severe pain; and in these cases, astringent mouth washes, of which more or less is swallowed, are necessary. An infusion (the alcohol makes tinctures objectionable,) of cinchona with myrrh added to it, is preferred by us, though we have occasionally used a simple solution of tannic acid. An infusion of red hemlock bark is thought a homely, yet a very good application for this purpose. A large proportion of animal food, and especially, tender and juicy beef, has also seemed to us more beneficial.

In adhering to the usual descriptions of *cholera infantum*, our author fails to see that that name is given to several diseases and ought not to have a place in scientific nomenclature. Still, to follow him, we shall use the words in the same manner that he does. Now the traces of scurvy are, to our mind, very indistinct, if indeed, they exist at all, except in those cases in which a protracted diarrhoea in a mild but persistent form, has debilitated the little patient and rendered him anæmic. Nutrition here, is very seriously interfered with, and we will not say that the condition may not be in some respects like scurvy. But that it is scurvy, *pure et simple*, we see no reason to believe. Dr. Knapp's treatment is, to give the mother, if she is nursing the child, a free, generous, and varied diet, including not only some fruits, but salads, commencing their use very gradually, for too sudden a change to them will be injurious. At the same time, he orders the following mixture:

R.—Tr. rhei comp.

Tr. catechu.

Acaciæ mucil.

Syrupi simp. aa.,

Morphiæ acetatis,

Sodæ Bicarb.

Ammon. carb. aa.,

ʒi.

gr. i.

ʒi.

Of this, the mother is to take a teaspoonful every three hours in a small draught of brandy toddy, and the infant (if about six months,) to take forty drops in a teaspoonful or two of the toddy. The medicine is liked by children, and therefore is readily taken, which is an item of great importance. At the same time he uses this prescription:

R.—Pulv. acid. citric.,	ʒi.
Quiniae disulph.,	gr. xvi.
Morphiæ sulph.,	gr. ij.
Spt. vin. gall. opt.,	oij.

Of this, the mother is to take a tablespoonful in two or three table-spoonsful of hot water generously sweetened with loaf sugar, at noon, at evening, and at bedtime. The infant is to take about a small teaspoonful of it prepared in the same way, only more dilute, and at the same hours of the day.

We do not learn that the use of drugs is otherwise recommended, and though we have not used either of these prescriptions, we do not doubt that in appropriate cases, they would accomplish all that could be desired. But it is not with children at the breast that the practitioner finds the most difficulty in checking diarrhœas; so long as the mother can be nursed, we rarely find much trouble in treating the disease of the infant; but deprive the latter of the mother's natural supply of food, and then disease may occur, against which, these mixtures would be as powerless as water. Herein, this paper is quite incomplete, and it all arises from the blind obedience to custom in talking and writing about *cholera infantum*, as if it were a veritable disease or a unit, instead of the name covering a conglomeration of maladies.

It is, indeed, refreshing to meet with something of independence of thought in a writer, and this, together with the useful incidental observations scattered throughout these volumes, will pay the reader for the labor that is necessary in order to master them. We commend not the theory, and yet this word in commend of the books. p.

A Text-Book of Vegetable and Animal Physiology, designed for the use of Schools, Seminaries, and Colleges in the United States. By HENRY GOADBY, M.D., &c., &c. Embellished with 450 illustrations. New York: D. Appleton & Co., pp. 313.

This book is intended to be, as it certainly is, entirely different from the ordinary physiologies for schools. Of those productions we have had repeated occasion to express our opinion, which the progress of

time confirms, and with joy we hail the appearance of this book, as a substitute for them.

Who Dr. Goadby is no microscopist needs to be told, for at every turn he finds himself indebted to him for many valuable aids in his manipulations. To others it may be sufficient to say, that he was formerly Dissector of Minute Anatomy to the Royal College of Surgeons, (England,) and is now Professor of Vegetable and Animal Physiology and Entomology in the State Agricultural College of Michigan. It is in this last institution that he has felt the need of a text-book for his classes, different from those in common use, and this volume results from the demands of his necessity. It is not an attempt to teach a smattering of human anatomy, nor does it aim to make Charlotte and Nancy perfectly familiar with all the knotty questions of physiology; but by combining instruction concerning the tissues of animals and vegetables, together with their physiological uses and importance, it opens a field fitted to interest the most refined girl, and yet worthy to call out the more vigorous powers of young men. The youth of either sex are always interested in the study of vegetable and animal life, and it is a fitting recreation for the interval between severer studies, calling as it does for the exercise of careful observation, and inevitably leading to a profounder admiration of the perfectness of God's handi-work. Few, except medical men, who have been trained to it, can avoid a feeling of disgust at the plates illustrative of the contents of the human abdomen, or of the dissections of the muscular system of man, which *adorn* the ordinary text-books on physiology, and if the question of their utility is mooted, it must be acknowledged that there is none, or at any rate not more than there is in the study of the *volvox*, or the beautiful rotiferæ, which can be examined with the most unalloyed pleasure. Dr. Goadby then is right in substituting for the disagreeable study that which is pleasant, and in endeavoring to introduce the study of comparative histology and physiology, in place of the subdivisions which pertain only to the human race.

The plan of the work is this: It is divided into ninety-six chapters or lessons, as they are styled, twenty of which are included in Part I., which treats of vegetable tissues, the remainder coming under Part II., which treats of animal tissues. It is difficult to give an analysis of these lessons, because they are themselves very much condensed, sometimes to a degree which seems faulty, though we do not see how it would be easy to avoid it where there is so much to be said. In general, however, of the first part, three lessons are of an introductory

character, in which general topics are discussed, as the general position of physiology and histology, the nature of cells, their mode of growth and reproduction, and their similarity in plants and in animals. The proper consideration of vegetable tissues is then taken up, and in this order: Starch, gums and sugar, oils, wax, chlorophylle, resinous products, caoutchouc, raphides, sclerogen, vascular tissue, ducts of different varieties, silica in its various situations, hairs, cuticle, leaves, endogenous and exogenous stems, medullary rays and bark. The same general method is observed in the second part, in treating of animal tissues. After considerations of the original compounds of animal bodies, the subject of cells is taken up, and their use and functions in different tissues and fluids shown, and as illustrative of and depending on these doctrines, the nails, the hair, and the epithelium are spoken of. Then the organs of nutrition are described, commencing with those in the lowest grades of being, and rising gradually to the mammalia and man. Twenty-nine lessons are thus occupied, while eight more treat of the structure of the teeth, of the salivary glands, and of the properties of the gastric juice and mucus. Three chapters on muscular fibre are followed by nineteen upon the nervous system, the development of which is traced, like that of the organs of nutrition, from the most rudimentary forms, as in the entozoa, up through the various grades of life to its highest development in man. The remaining lessons are concerning the eye, it being described in the annellata, crustacea, myriapods, insects, arachnida, fishes, reptiles, birds, mammalia and man.

Scattered throughout these chapters are valuable digressions, of a practical nature, which naturally grow out of the subject, and are quite as likely to attract attention and to be remembered, as if they had been prefaced by more formal introductions. In one of these digressions the author attributes the death of the late Lorenzo B. Shepard, Esq., to bathing immediately after a full meal; and it may be worth while for us to correct him, as we happened to be called to see Mr. S., by stating that he had not breakfasted when he went to bathe, but intended to do so afterwards.

In a foot-note we find a singular statement concerning the intestinal villi, which so entirely differs from the ordinary teachings concerning their mode of absorption, that we quote it entire:

"Thirty years ago, during the author's studentship, desirous of obtaining information on this subject, he killed a cat, and proceeded to examine the small intestine as rapidly as possible. He saw the sum-

mits of the villi *all open*, apparently as wide as their own diameter, but they soon closed up, and remained shut.

Subsequently he repeated this experiment to a party of distinguished medical men in London, including some of his teachers.

Having to arrange the preparation under the microscope, he again saw the same sight, but, owing to the rapid loss of vitality, the villi so soon closed that not more than two or three of the gentlemen present had an opportunity of seeing anything of this interesting exhibition, and then so hastily that it was far from satisfactory to them. He has not since repeated this experiment."

It may be worth while for some of our physiologists, who are skilled in vivisection, to repeat this experiment, and see if they can attain similar results. Certainly the doctrine which is usually taught on this subject is very different. Is it erroneous?

A word is due concerning the wood-cuts, which are profusely scattered throughout the volume. They are made by white lines on a black ground, a method which is frequently used by the French, and which seems to possess several advantages over the more common methods of illustrating by black lines on a white ground. This must very materially diminish the expense of the wood-cutting, for the labor is very much less. The lines are drawn with more sharpness, and thus there is more spirit in the cut. To quite a number of them color has been added, and the effect of imitating the appearance of microscopic injections is admirable. All are creditable to the young artist who executed them. To find so many new cuts and so few old ones is as agreeable as it is unusual, and adds not a little to the pleasure of the reader.

In conclusion we may say that this book seems to us to be well adapted as a text-book for the classes for whom it is designed, and is worthy of general trial in place of those physiologies which are now in use, and which are of little benefit, we hope they are not very injurious, to the youth in whose hands they are placed. P.

A Practical Treatise on the Causes, Symptoms, and Treatment of Spermatorrhæa. By M. LALLEMAND, formerly Professor of Clinical Surgery at the University of Montpellier, &c. Translated and edited by Henry J. McDougall, M.R.C.S., &c., &c. Third American edition, pp. 328. *On Diseases of the Vesiculæ Seminales, and their associate organs, with special reference to the Morbid Secretions of the Prostatic and Urethral Mucous Membrane.* By MORRIS WILSON, M.D., pp. 52.

The American republishers of these two treatises, Messrs. Blanchard & Lea, have united them in a single volume, which their dimen-

sions will readily permit, and which adds to the convenience of reference to them.

The former has been too long before the profession to need any minute account of this its third edition in this country. It remains the standard authority upon the subject, and thanks to Mr. McDougall, it is in a form much more convenient than that of the original work.

Dr. Wilson's essay covers much of the same ground, though in a more condensed manner, and with some additional and interesting observations upon the use of remedies. It makes a very good digest of the latter observations upon this malady.

In speaking of various remedies, Dr. Wilson recommends the use of cod-liver oil, and speaks thus of his mode of exhibiting it:

"The chief objection which may be raised against cod-liver oil, is its aptness to occasion nausea, a circumstance which arises partly from the weakened powers of digestion, and partly from the large quantity usually thought necessary to be administered. The objections to this remedy, are in many instances got over by a preparation which I have found of great value, namely, the cod-liver oil of chocolate. It is composed of the purest oil, carefully combined with chocolate in its most agreeable shape. To cover the odor and taste of the oil as completely as possible, various essential oils can be added to the chocolate, by which means it becomes a pleasant article of diet. Prepared in this way, the oil is much less likely to occasion nausea, or otherwise to interfere with the delicate digestion that patients suffering from spermatorrhœa are so liable to experience. the division of the particles of the oil by chocolate, itself a highly nourishing substance, renders the compound very easy of assimilation by the system."

The treatment of spermatorrhœa is always difficult. The phases under which it makes its presence known are so numerous that it would be difficult to detect were the patient to aid in its discovery. But this, sometimes from ignorance, sometimes from shame, he does not do, and it is only when the physician has detected the cause of disturbance at some unguarded opening that the patient becomes his ally instead of his opponent. A careful study of these treatises is therefore a necessity to him who would be fully prepared to encounter this malady, and to such we commend it.

But prevention is far better than cure, and this duty devolves upon medical men. They should let it be known that too much care cannot be exercised in guarding children, while still very young, from falling into this habit. The separation of the sexes in a family of children

should always be insisted upon, and it is better to separate individuals of the same sex. Years of sound health will repay years of wretchedness and care, while regret will never fail to attend upon the sad efforts of careless neglect.

An Essay on the Pathology and Treatment of Scarlet Fever. By CASPAR MORRIS, M.D., &c., &c. Philadelphia: Lindsay & Blakiston.

The perusal of this essay has afforded us great pleasure, marked as every page is by common sound sense, and with the evidences of thoughtfulness and good judgment. Dr. Morris has had many opportunities for seeing the fearful disease which is the subject of this paper, and has improved them. He has seen it under a sufficient variety of circumstances to know that it is one of the most, if not the most, treacherous of all diseases, and that there is no specific remedy for it. Neither does he hesitate to acknowledge that patients do die from its effects while under his care. All of these things lead the reader who has had any experience with scarlet fever, to far greater confidence in his statements, and to place much more value on his recommendations than if he had proposed to write on the *successful treatment* of the disease.

A former edition of this essay has been for some time in the hands of the profession, and it is therefore unnecessary for us to dwell upon its doctrines; but by the addition of new matter, it is made to be fully up to the experiences of the present day, and we confidently commend a careful consideration of it, especially to our junior brethren.

We believe Dr. M. is in error in his view or suspicion, as he terms it, of the relation of diphtheritic croup to scarlet fever, to wit, that the former is only a variety of the malignant form of the latter. The preference which the disease shows that the larynx as its point of attack, together with the prostration of the vital forces which its progress induces, eminently fit the patient to be attacked by *diphtherite*, just as in other cases it makes way for rheumatism without rheumatism being a variety of scarlet fever.

With gratification we notice his appreciation of the excellent effects of capsicum, and his commendation of the homily but admirable mixture of a teaspoonful of capsicum, as much salt, a large spoonful of vinegar, and half a pint of boiling water. The dose of this, is a small

teaspoonful every hour or two for a child five years old, and we know it is very grateful and very beneficial in many instances.

Appended to the essay is a paper by Dr. William Douglass, of the epidemic of scarlet fever in Boston, in 1735 and 1736. It has a scientific as well as historic value, and is entitled "The practical history of a new epidemical eruptive miliary fever, with an angina ulcerculosa."

Dr. Morris' style is a very pleasant one, and the publishers have been careful to give it a fitting typographical dress. P.

A Manual of the Practice of Medicine. By T. H. TANNER, M.D., F.L.S.C., &c. First American edition from the Third Revised and Improved London Edition. Philadelphia: Lindsay & Blakiston. 1858.

This little volume, designed for the use of students and over-occupied practitioners, must suffer the pains and penalties of its class. The objections to all "manuals," are, that from the nature of their construction they are apt to lack unity, clearness, and a necessary fullness; that their effects upon a student's mind is not provocative of further investigation; and that a sole or customary reliance upon their teachings begets a low standard of attainment in the branch whereof they treat.

If, however, as seems here to have been successfully attained, there be condensation without obscurity; a judicious winnowing of medical truth from much chaff; a correct dealing with principle; a proper acquaintance with the present position of our science; and if, moreover, regarded by student and practitioner not as an ultimate authority or guide in practice, but as indicative of the proper path to follow, and suggestive of further inquiry, we do not know but the little work before us may have a useful mission.

We quote the concluding sentence of the author's remarks on inflammation, as showing the catholic tendency of medical teaching at the present day on the question of nature and art in the cure of disease. "From all this, it follows, that in the treatment of acute inflammatory diseases, practitioners must be content to trust more to nature and less to heroic remedies than they have been in the habit of doing; for it is highly probable that though we may be able to guide inflammations to a successful termination, yet we cannot cut them short, and any attempts to do so will merely increase the patient's danger."

The work contains an appendix of numerous valuable formulæ—a classified list of mineral waters—a table of the proportions of active ingredients in some important preparations, and a copious index. L.

Pathology and Treatment of the Paralysis of Motion. By J. P. BATCHELDER, M.D., New York.

In the pamphlet of sixty-two pages, entitled as above, the author has given scientific and practical reasons for the employment of a valuable adjunct to medical practice, which has been too positively excluded from use on account of its irregular source, and its intimate association with some parasitic offshoots of our profession. Medical gymnastics, or active and passive muscular movements directed by an intelligent medical man may become a means of great usefulness, and in this valuable monograph we find the results of such a direction of movements applied to that disease called paralysis of motion.

Dr. Batchelder, however, does not consider this form of paralysis as a disease, "but the symptom of one, which mainly affects the voluntary muscles, or the muscles of animal life. The non-communication of the appropriate stimulus to these muscles by the mind constitutes the disease, of which the paralysis is a symptom." As a consequent of this a habit is formed which adds to the difficulty, so that from a constant failure of the proper stimulus morbid conditions arise, of which the paralysis is also a symptom.

In two points of view then is paralysis to be considered a symptom: 1st. In relation to the functions of the affected muscles. 2nd. In respect to their physical condition.

When a person is affected with paralysis, he is at first unable to perform any voluntary motion on account of an interruption in the line of communication of the nervous stimulus, or from the failure in those cerebral changes which induce these motions. After the primary cause is removed the quiescence which has degenerated into a habit continues, and the will is powerless, the attendant cerebral changes not taking place.

Dr. B. proposes to recover the lost power "by causing the members to perform the motions calculated to produce the changes in the brain. The motions first, and the changes in the cerebrum next, is the order and method of nature."

There are different conditions of the muscles in paralysis, which according to Dr. B. require separate attention; some are powerless, some

contracted, some acting irregularly, but generally speaking "all concur in disregarding the volitions of the patient."

From these conditions the following indications of cure are deduced:

1. To restore strength to the powerless muscles.
2. To overcome abnormal contraction in others.
3. To obviate or counteract the perverse action of such as act irregularly.
4. To renovate the will, and reconnect it with the affected muscles.

In the treatment proposed to meet the first two indications, Dr. B. makes use of an "agent inherent in the muscles themselves, called by modern phynologists, 'passive contraction.' This power causes a muscle to contract and shorten whenever its origin and insertion have become approximated." Thus by bringing the origin and insertion of the muscles as near as possible together, and retaining them in such a position by mechanical means until this "passive contraction" has taken place a certain degree of power is restored to the paralysed limb. The apparatus is occasionally removed and the limb moved in different directions, the attention directed to these movements, the will taught to assist by concentration of effort upon them.

The perverted or irregular actions of muscles are also met by mechanical appliances until the one or the other yield to well directed efforts which are more or less under the control of the will.

The first three indications point directly to the fourth, which is, in fact, the ultimate object aimed at, viz: To renovate the will and reconnect it with the affected muscles.

This is effected by educating the will. The passive movements, the mind constantly directed towards them act through the peripheral brain and gradually produce those cerebral changes which precede consciousness. This being frequently repeated, the will gradually awakens, regains power by degrees, and finally ends by producing those movements which are at first passively made.

This constitutes a brief synopsis of the main points in Dr. Batchelder's excellent paper. The remedies principally used in the treatment of paralysis as electricity, galvanism and strychnine, according to Dr. B., have been employed rather empirically than scientifically. They should be used, he thinks, with great caution, and for the purpose of exciting motions, to which the mind should be directed, as already explained.

This paper cannot fail to attract attention, as it explains physiologically, and by the record of several cases, an easy, efficacious and scientific method of treating a serious form of morbid manifestation. D.

New American Cyclopædia. Vol. iii. BEAM—BROWNING. New York: D. Appleton & Co. 1858. pp. 768.

The third volume of this great undertaking, by Messrs. Ripley and Dana, is now lying before us, and gives us the right to say that the Cyclopædia is destined to displace all books of a similar kind from the shelves and tables of students. It is a real comfort to look over its clearly printed pages, for the purpose of getting concise information on such subjects as our time will not suffer us to examine at great length; and we regret that the whole alphabet is not furnished us, as our experience with two of *its* letters bids us believe that the rest of their brethren will be quite as full and accurate as they are. What surprises us, is the correctness of its estimate of living persons with so little of that wholesaled praise or detraction which generally accompanies all such notices. We hope that the publishers will be encouraged by a large sale of this very useful publication, so that they may be repaid liberally for their outlay. No one who purchases will regret the expense.

L. H. S.

PROCEEDINGS OF SOCIETIES.

Academy of Medicine. Dr. J. P. BATCHELDER, *President.*

[Prepared for the MONTHLY, from Dr. GEORGE F. SHRADY'S Verbatim Report.]

The discussion on the structure and functions of the Prostate Gland commenced at an extra session of the Academy, in June, was renewed at the regular meeting in August. Dr. VALENTINE MOTT, who was present, was called upon to open the discussion. Although he was not aware at what point the subject had been left, he would at that time make a few remarks upon the Relative Anatomy of the Prostate, reserving the discussion of its diseases until another session.

The prostate gland, said Dr. Mott, was situated in the pelvis, equidistant from and on a line with the rami of the ischia, above the membranous portion of the urethra, and upon the rectum, where there is no interposition of peritoneum by the lower part of the bladder, called the *bas-fond*. It is ordinarily supplied with a fair amount of vessels, and in a surgical point of view, it is important to remember that the little vessels which supply it in its normal state are unimportant; but if we regard them closely in disease we will find they assume a great

importance. Let us examine these vessels; let us take up the veins. These are very remarkable—remarkable in their number—remarkable in their size, and are principally interesting in connection with the troubles which arise in this organ. When these veins are cut, even in the middle period of life, a great flow of blood will follow; so great that after the lateral operation for stone, I myself have been very much alarmed at its quantity, and have feared the consequences of it. During the whole course of my surgical experience, now extending over more than half a century, I have rarely been surprised at any great loss of blood, except from these parts. It seems to be unimportant until about a week after the operation. At that time, I have sometimes been informed of the sinking condition of my patients, and have found them almost pulseless from the loss of an enormous quantity of venous blood. Generally, at the commencement of the operation there is some arterial hæmorrhage, which is trifling in comparison with the subsequent venous hæmorrhage, which, in some instances, has compelled me to plug up the opening with a sponge, taking the chance of the blood accumulating in the bladder.

The veins that are about the neck of the bladder run in such a way that they are always necessarily cut in the operation I shall presently describe. Under certain circumstances, these veins are in a varicose condition; nor is this condition confined to the later periods of life, for we meet it frequently in early life. The collection of veins in this region is so large, and they are so numerous, that they go by the name of *venæ pampiniformæ*. They run immediately over the proper capsule of the prostrate and open upon the free surface of the bladder, and are undoubtedly the source of the very serious hæmorrhage that sometimes takes place late in life, when there is no disease of the prostate, no tumor of the bladder or other cause to account for it.

These veins are ordinarily the only vessels of any considerable size involved in operations around these parts, but occasionally arteries are met with running between the proper capsule of the gland and the ilio-vesical reflection. These arteries are of considerable size, coming, as they sometimes do, from the internal iliac instead of the internal pudic, and distributed to the bulb, crus and dorsum of the penis of that side. These vessels have been described by Haller, Burns, Barclay, and also by one of the Munroes. Whenever a profuse hæmorrhage occurs from an operation about the prostate gland, in which the gland is cut, if the internal pudic artery is not wounded, then it is gratifying to know that an artery of the description referred to runs in that di-

rection, the hæmorrhage from which, when cut, can be arrested only by the sponge. *

The relative surgical anatomy of this gland is exceedingly interesting. Though for many years not well understood, it is, perhaps, now fully known and developed.

The prostate is described as consisting of two lobes, and perhaps we are not all prepared to know the fact that these lobes are very ill defined after the adult period; but we know the fact, that before the fourth or fifth month, it consists of two distinct lobes, separated by an isthmus which becomes in adult life the third lobe.

This gland has its proper capsule, and is a secretory gland; but whether conglomerate or follicular, is yet a subject of discussion.

The observations of Amusat have fully settled the question that the prostate gland is entire above the urethra—that it runs over the anterior part, and therefore surrounds it.

Besides this capsule there is another—the fascia iliaca.

This fascia covers the iliac muscles, goes over the pelvis under the great vessels, then down the side of the pelvis, and from thence to the bladder, being previously attached to the side of the bladder, where it forms a perfect septum between the perineum and cavity of the pelvis. This is a most important fact to be remembered in its relation to the operation for lithotomy.

This ilio-vesical fascia passes from the pelvis to the side of the bladder at an angle which, when we are erect, is some 10° or 15° more above the plane of the pelvis than when we lie down. From the side of the pelvis to the bladder it is covered by the levator ani muscle. When we get down to the side of the bladder, just above its neck, there is a close layer of this fascia, which goes over the prostate, enveloping it next to its proper capsule. So far its anatomy is well understood.

Every sub-pubic operation, with the exception of the recto-vesical, involves the direction of this fascia, and upon maintaining the integrity of this septum—thus guarding against urinary infiltration—the success of these operations, *ceteris paribus*, depends.

I maintain that operations for lithotomy ought always to be performed with reference to this septum, otherwise the patient's life is greatly in danger.

Nothing has glorified modern surgery more than the study of relative anatomy. It has dignified operative surgery as a science, and he who does not cultivate this study operates in the dark. This knowledge is beautifully illustrated in the anatomy of the groin, in the im-

portant relations of the epigastric artery to the internal and external abdominal rings. It is not every one who teaches who points out the relations of these parts. To operate successfully, the surgeon must first familiarize himself with the parts to be operated upon.

The common operation for lithotomy most in fashion is the lateral, known from the time of old Friar Jacques. It divides one side of the prostate only, and goes parallel with the iliac fascia, and not above it, and does not open into the cavity of the pelvis. He who performs the operation with reference to these points will be most successful.

I say as I have said for many years, that all these operations are better done with some sort of a knife than with any other instrument whatever.

Without arrogance, I may say that I have performed more operations for stone than usually falls to the experience of surgeons. The number amounts to 164, and I have never used in the operation anything but a knife or bistoury. Upon the whole I prefer a straight bistoury. I was occasionally in the habit of using Mr. Thomas Blizard's knife. Of the gorgets introduced by Cline and Physic I consider that of the latter the best. Cline's is a dangerous instrument. I have seen him use it. Physic's is a dangerous instrument also, unless one well understands the relative anatomy of the parts. This knowledge was not in the fashion in his day.

The knife goes through one side of the prostate and below the loose layer of the fascia iliaca. Contrary to the opinion and method of many, I cut through the whole prostate. I never wish to tear it. If you are below this fascia you may cut to the ramus of the pubis without danger. Those not familiar with the use of the gorget, by depressing the hands elevate the blade, and consequently go too high up and incur the danger alluded to.

I never cut the internal pudic artery with the knife, because I cut downwards and outwards in such a way as not to encounter it. I look upon it that the operation can be more easily performed in this manner.

Some cut through eleventh-twelfths of the gland, and tear the rest. I know enough about wounds to say that lacerated ones are bad ones to heal any how, and you had better make a clean cut. The idea has been entertained that by cutting entirely through you cut this fascia, but having an eye to the course of it there is no danger.

The bilateral operation is entirely free from wounding the int. pudic artery; but I must say that I never saw the elder Cline, the preceptor of Sir A. Cooper, operate for stone, that he did not cut that artery.

I have seen the hæmorrhage so profuse that it would run off the table in a stream, and saturate the bed, and even run through it; I choose to avoid it.

In regard to opening the bladder in different ways, for the purpose of evacuating urine, there is no danger, except in the perineal cut.

The operation per rectum is unattended with danger, not involving the fascia, and is therefore resorted to when the bladder is to be emptied. One thing I will say, that during the many years I have practised surgery, it is gratifying for me to look at this fact in connection with my life, *that I never punctured a human bladder*. I am always horrified when I hear a man has punctured the bladder. I have never seen a case of stricture that could not be relieved by the judicious application of instruments.

In that disease of the prostate confined to old people, I have never failed to introduce the long catheter, even though others had repeatedly failed in the attempt.

At a special meeting of the Academy on September 9th, Dr. Mott continued his remarks as follows: Besides the covering mentioned at the last session, at which the prostate gland was discussed, this gland has a closer covering or capsule, which is the ilio-vesical reflection of the fascia iliaca as it comes from the side of the pelvis and goes to the side of the neck of the bladder. We have here also the levator ani muscle covering both portions of this fascia iliaca. The prostatic portion of the levator ani, as well as where it slings the membranous portion of the urethra, must be cut in the lateral operation for stone in the bladder.

The *sinus pocularis* or *utriculus prostaticus*, situated a little in advance of the veru montanum, has been considered by Weber as a rudimentary uterus; a homologue of that organ, probably because Morgagni found in two instances that the vesiculæ seminales terminated in it. In a surgical point of view this little cup should be remembered, as a catheter or bougie will be easily caught in it. This can always be avoided by an experienced surgeon, by withdrawing the instrument a little and tilting it up before passing it into the bladder.

The veins about the neck of the bladder in a person advanced in life will have in them what pathologists denominate *phlebolites*. It is from these veins that proceed the alarming hæmorrhage of which I have already spoken. It seems to be confined to operations that are performed on persons over 50 years old. For myself, I have operated on individuals over 70, and have not found these veins so troublesome in advanced age as in middle life. Neither the unilateral or bilateral

operation avoids these veins; the only way is to operate above the pubis, which is seldom done in this country.

Dr. Mott then proceeded to speak briefly of the *Diseases of the Prostate Gland*.

The morbid anatomy of the prostate is exceedingly interesting, involving as it does so many terrible and afflicting affections. It is a very singular fact, although we are well acquainted with it, that this body will frequently enlarge when other parts of the body are diminishing and shrivelling in the decline of life. But this is not the only disease of this organ. There are affections of it that are very formidable besides the mere hypertrophy.

And first of *Atrophy*. This gland has been found diminished in its natural size; its proper capsule has been seen filled with an aqueous fluid. The atrophied condition of the gland has been described by many pathologists, and particularly by Sir Benj. Brodie and Mr. Cooper. It is not necessarily confined to youth or old age; it follows no stated law, but arises at any time.

Inflammation of this gland occurs more frequently than we are aware of; whether it be of the secretory portion, or of the filamentous or areolar tissue of the gland I shall not stop to inquire; my impression is that it is an inflammation of the entire tissue of the gland. The symptoms are, remarkable tenderness on introducing the finger into the rectum. When this extreme sensitiveness exists with difficulty of passing water, it is evidence to my mind that the gland is very much inflamed. Suppuration may occur in this gland, as we know from cases recorded by such observers as Lallemand, Sir Benj. Brodie and others.

Inflammation of the prostate may be occasioned by the violent use of instruments, sexual indulgence, onanism, urethritis, &c.

Suppuration of this gland generally takes the route into the urethra, so that Lallemand states that he has seen the openings from the prostate large enough to admit the end of a catheter, from which openings pus escaped into the urethra. It will sometimes make its way through the rectum, sometimes into the perineum, both of which I have seen.

Inflammation of this gland may be followed by the deposit of a large quantity of pus. Brodie says as much as a pint was discharged at several different times from a case he saw.

Ulceration is a process not common in the prostate. It has occurred from the introduction of instruments into the urethra, which in-

duced inflammation, accumulation of pus, pressure on the gland, and ulceration.

Tubercles are occasionally met with in the prostate, and from softening progress to ulceration. Lallemand records an instance in which thirty abscesses and as many tubercles were found in this gland. The prostate is therefore liable to the same condition of things we find in the testes, mesenteric glands, vesiculæ seminales, and the lungs. Dr. Gross relates a case of tubercles in this gland, and states that they follow the law of tubercles in other parts of the body.

Again, the prostate is said by some to be liable to *cancer*. If we adopt the language of Mr. Walshe, that all forms of disease that are heterologous are cancerous, we consequently may have it here. I prefer, however, the old arrangement of cancer and malignant disease, or what does very well, hard and soft cancer. I am well aware that they both have the microscopic characteristics of cancer. These malignant forms of disease occur within and about the prostate. The body of the prostate is not so apt to be involved as in other forms of hypertrophy.

There are three instances on record—one by Sir A. Cooper, one by Mr. Stanley, of London, and another by Mr. Langstaff—of malignant disease in this gland in children, showing that it is not necessarily confined to old people.

The great Dr. Fothergill, of London, died of malignant disease of the prostate. Some few years ago I had a case near this city, which was evidently a fungous growth about the prostate, and resembled that of Dr. Fothergill. I have seen another instance where the tumor was not of the prostate, but a polypous growth, which acted as a valve, and gave rise to the strongest symptoms of stone in the bladder. This should teach us that nothing but a sound grating against another hard substance should justify the operation for stone in the bladder.

The last affection of this gland I shall name is *senile hypertrophy*. It is a curious fact that it should occur in advanced life, and be confined to the gland itself. A dissolute life is not necessary to produce it. The most tormenting part of this enlargement is the third lobe of Sir Edward Home—the pathological lobe of Velpeau. It is of a remarkably hard texture. Brodie speaks of it as having a stony hardness. Rokitsky calls it a fibrous enlargement, others denominate it cystic hypertrophy on account of the cyst found in it.

This enlargement comes on very gradually, and is not at first accompanied with much pain. The first symptom is difficulty in evacuating the last remnant of water that is in the *bas-fond* of the bladder. Change of position has to be frequently resorted to, and persons with

this difficulty make water better standing up. Some are obliged to get down on their elbows, so as to give the bladder an opportunity to force the urine over the third lobe.

With all our resources of treatment we can make very little impression upon the prostate affected by senile hypertrophy. In a difficulty of this kind it is of great importance that a person should not have his bladder over distended. Everything that removes irritation is of the greatest importance, and therefore it is often requisite to relieve the bladder by means of the catheter. I know of no other treatment than palliative; I have seen more good derived from a seton in perineo, at the same time keeping the bladder empty and the bowels soluble, than from anything else.

The question of the removal of this third lobe has been raised, and several instruments devised for that purpose are here submitted for the examination of the Academy.

Finally, gentlemen, let me call your attention to one other affection analogous to that called by old Father Pelletan "engorgement chronique de la membrane du larynx;" I mean the *uvula vesicae* of some—the *lutte vesicale* of others. Dr. Baillie first described it as a membranous fold, in the form of a bar across the vesical orifice of the urethra, and has given a plate of it in his *Morbid Anatomy*.

Immediately at the neck of the bladder there will be an enlargement of the mucous membrane, sometimes from above downwards, but more generally laterally. This gives rise to much difficulty in passing the urine. The catheter passes readily. Sometimes it is very difficult to form a diagnosis between it and enlarged prostate. In the *uvula vesicae* the catheter passes very readily. In prostatic enlargement there is frequently great difficulty.

Any instrument passed into the bladder will generally be followed by a small discharge of blood, which alarms the patient, who thinks it arises from want of skill on the part of the operator, whereas it is desirable and beneficial. In the opinion of Guthrie this is a curable affection. Le Roy d'Etiolles has great confidence in scarifications. These, with the application of caustic, constitute the principal means of treatment.

The same principle of treatment has been applied to a similar affection of the lips of the glottis by two distinguished fellows of the Academy, Dr. Gurdon Buck and Dr. Horace Green.

Academy of Medicine.—Obstetric Section. Regular Meeting, June 21st.

[Reported by GEORGE F. SHRADY, M. D.]

After the minutes of the meeting were read, *Dr. Barker* said, that with the permission of the Section he would relate a case which had recently occurred to him, having a bearing on the discussion of the last meeting, in which he had substituted turning for the forceps, for a reason which he believed to be unique. It was the seventh labor in a lady of large frame and very full habit, whose former labors had been very severe. The child was lost in the fifth and sixth, and she was very dangerously ill for some days, having convulsions during and after-labor.

In this labor she was attended by *Dr. Parker*, and after some hours she had a severe attack of convulsions. I saw her soon after the eclampsia. She was bled freely, losing fully a quart before a decided impression was made on the system. She was then brought under the influence of chloroform, and had no more convulsions. If allowed to come out from under the effect of the anæsthetic she complained of headache and specks before the eyes. The uterine contractions were very feeble, with very long intervals. Being very anxious to save the child, we determined to hasten the labor as much as possible, and to deliver by forceps as soon as the first stage should be completed. Uterine contractions were excited by pressure over the fundus and dilating the os tincæ by the finger. It was nearly four hours before the os was sufficiently open to justify the attempt to use the forceps. I then passed my whole hand into the vagina, to protect the soft parts of the mother, as is my usual custom when using the forceps with the hand at the superior strait, when I discovered the cord pulsating very feebly, and wound three times around the neck. I then hesitated as to the propriety of using the forceps, for if the cord should happen to be very short, not only would the life of the child be imminently jeopardised, but that of the mother also from forcible detachment of the placenta, particularly as we had great reason to apprehend inertia of the uterus after delivery. After some discussion we decided to substitute turning for the forceps, as offering a better chance for both. Version was accomplished very easily, but the forceps were necessary for the extraction of the head, which was a difficult operation. The child was still-born, but by the use of Marshall Hall's ready method, and other means, it was resuscitated in the course of three quarters of an hour. Both mother and child are now well. The cord was very short, the portion not around the neck being less than five inches. I

believe that by any other method of procedure the life of the child would certainly have been sacrificed, and in all probability that of the mother also.

Dr. Gardner asked if he (*Dr. B.*) could not disengage the cord when his hand was introduced?

Dr. Barker said he tried, but could not succeed.

Dr. Gardner stated that he delivered a head in that situation with his tractor, and it served very well.

Dr. Sewall asked how long *Dr. B.* would think it advisable to keep up the efforts at reanimation?

Dr. Barker. It varies with the different circumstances of the case; if the child continues warm and the slightest pulsation over the heart can be detected, I should continue my efforts for two or three hours at least. *Dr. Budd* had one successful case after 3 hours' continuous efforts.

Dr. Shanks thought that *Marshall Hall* recommended not less than two hours.

Dr. Barker then announced the subject for discussion;

Removal of the Placenta, in the early months of Pregnancy, by Evulsion.

Dr. Gardner stated that the proposition he made in his paper was in connection with operations upon the os in an undilated state. The placenta in these cases is frequently retained, and it is difficult to prevent excessive hæmorrhage. In these cases he introduced a small pair of polypus forceps and withdrew the placenta. The great difficulty to surmount in these cases is, that the orifice is very small, and the placenta is very broad. In this connection, he referred to a case that had come under his notice, where a lady had been subject to little oozing hæmorrhages for a time, when suddenly the blood came in gushes. The tampon was used, but the blood trickled through, then the polypus forceps was introduced, the placenta, &c., removed, and there was a cessation of the hæmorrhage at once. In another similar case, a patient of *Dr. Douglas*, he removed an ovum about 3 months old, exactly the same way. In this instance the ovum was partially detached.

Dr. Hubbard stated that he had never used any instruments to take away the placenta in cases of abortion. I have had, said he, a good many cases of flooding and abortion, and my rule has been to keep the patient in a recumbent posture and to use the tampon. What I consider to be the best is powdered alum placed on a cloth, tie it up and put it against the os, and then behind that a firm

sponge, in a more or less dry state; as the blood passes in it becomes large and fills up the cavity of the pelvis. In almost every case it has ceased without any further trouble, by compelling the patient to keep quiet for 2 or 3 days.

I was called to a case of severe hæmorrhage where the patient was between 30 or 40 days pregnant. On examination, I found that the mouth of the uterus was easily dilated; passing my finger in beside it, I attempted to detach the placenta with my finger, I took it all away, and I have now a smaller specimen to show than any other that I have seen. The embryo is about the size of a kernel of wheat.

I can readily conceive of cases where an instrument, such as described by Dr. Dewees, for removing the placenta can be used. I think it is seldom that instruments are required; I think the instances very rare where hæmorrhage cannot be arrested by some of the means referred to. The tampon will form a clot, stop the vessels, and then dilate the os.

Dr. Sewall—Is there any difficulty in introducing these forceps? May they not go wide of their mark?

Dr. Gardner—If the placenta would be entirely adherent, (which it never is in hæmorrhage,) then there would be great difficulty; but you will always find some portion of the placenta torn off, and you can grasp it without difficulty. Very frequently the placenta is entirely detached.

Dr. Sewall—Why would not ergot be serviceable in those cases?

Dr. Gardner—There is too large a mass to go through such a small opening. He stated, in the early months in operations about the uterus, he had great difficulty in preventing the uterus from slipping about; to obviate which he used an instrument that was so constructed that the end of a shaft could be bent at right angles, and thus the uterus be fixed in a position desired.

Dr. Martin—I have been placed in a situation where I would have been glad to have had an instrument; I believe Dr. Churchill's instrument would answer every purpose.

Dr. Shanks—I have been called to several cases of adhesion, but I have never yet had any difficulty with regard to the placenta. When the fœtus came away, and there was considerable hæmorrhage, I have found upon examination that, perhaps, there had been some coagula within the lips of the uterus. In such cases I have generally applied a bandage, giving cooling laxative medicines—a solution of salts with a little rose water or sulph. acid arom. I have been called to cases that have lingered for some days. In one such case, I recollect particularly,

when insinuating my finger within the os I discovered the placenta embraced within the lips of the uterus. It came away without any difficulty, and I had no further trouble.

He referred to the case of a clergyman's wife, he was called to see, who had an occasional hæmorrhage for a week or ten days; examining for the cause of the trouble, he discovered a detached placenta, three or four inches in length by one and a half in width, which he withdrew. There was no more difficulty afterward. He never had any occasion to use an instrument.

Dr. Sewall referred to two or three cases of retained placenta which were treated with the tr. ergot, separating the placenta, which before was inaccessible.

In the first case there was frightful flooding, the hand was introduced and nothing could be discovered. Ergot in connection with opium was administered. In a few hours the placenta was just within the mouth of the womb, where before nothing could be found. The hæmorrhage ceased and the woman recovered.

In another case, four months gone, a woman aborted; she had been bleeding more or less for a month, having had no physician, hæmorrhage coming on every day or two. In that case a drachm of tr. ergot was administered. In a few hours after the hæmorrhage ceased, and the placenta came away. She made a slow but very good recovery.

In another case a woman who was in the habit of aborting, four months gone, had the fœtus fall upon the floor. A physician was called in, and the necessary remedies were prescribed. The next day noon violent flooding came on. She sent for a physician, and he gave her some ergot; while the physician was gone flooding came on, and I was sent for. I found her very low. By this time the physician came, and told me that he had taken everything away. We stimulated her as much as we could, put on a binder and applied cold. While this was going on she had quite an attack of coughing, some clots were expelled, and I introduced my hand, and took away a piece of placenta about the size of a fist. There was no more hæmorrhage. She ultimately recovered.

I suppose that in all these three cases the utmost good was effected by the ergot. It seems to me a remedy of great value, for by its use, though at first we may not be able to reach the placenta, it will bring it so far along as to enable it to be grasped, and its delivery thereby rendered easy.

Dr. Budd felt very much disposed to question the propriety of removing the placenta in the early months of pregnancy by instru-

ments. While the placenta was lying loose he would have no objections to remove it, otherwise he would use the tampon. As far as his experience went, ergot exercised very little if any influence upon the uterus in the early months of pregnancy. He decidedly objected to its administration after very severe hæmorrhage, as he had often found it a direct sedative.

Dr. Underhill—The cases referred to are very common, and the symptoms cause very considerable anxiety, but I never knew a case fatal. It is a point with me when called to a case always to make a vaginal examination; I attempt to relieve it by the finger, and very often I succeed. In other cases I use ergot. When I find that this fails to act, I use the tampon. Dr. U. referred to one case that troubled him a great deal, where he was determined to use an instrument, but getting all ready for it, he found by examination that the placenta was in the vagina.

Dr. Gardner wished to be understood that the instrument which he used was his last and not his first resort in hæmorrhages from miscarriage. He was much in favor of the sponge, introduced in a dry state.

Dr. Underhill—I introduce first the speculum, and through it the tampon, the instrument being gradually withdrawn as the vagina was filled.

Dr. Barker—The subject we have been discussing is a very important one. Patients certainly do die from repeated hæmorrhages following abortion. I can now recall two where hopeless exhaustion had resulted from this cause before I saw them. In one, no physician had seen the case until it was too late to save her, although the gentleman first called removed with ease the portion of the ovum which had remained after the abortion. When I saw her she was moribund. In the other case fruitless, and, in my opinion, injurious means had been resorted to to remove the retained part of the ovum. The hæmorrhage had ceased before I saw her, but all efforts to restore exhausted vitality were unavailing, and she died five days afterward. In abortion no woman is free from the danger of hæmorrhage until the entire ovum is thrown off. Perhaps because I have never been compelled to resort to instruments, such as the placental hook of Dr. Dewees, or the placental forceps of Dr. Bond, and the various other contrivances for this purpose, I have been accustomed to express great doubts as to the necessity of ever using them.

I have no fear of manipulating with the sound in the non-gravid uterus for all necessary purposes of exploration, but I certainly would avoid, if possible, the danger of injury to the internal surface of the

uterus partially developed from pregnancy, when the predisposition to take on morbid action is greatly increased by the interruption of a normal physiological process, and still more increased by loss of blood. There is no question as to the propriety and necessity of at once removing the retained portion of the ovum. The only question is as to the best method of accomplishing this. I have never failed to do this, by the use of the following means: A compressed sponge of the proper size is introduced into the cervix, which not only effectually prevents loss of blood, but excites uterine contractions, so that the ovum or retained portion of the placenta is completely detached. In conjunction with this, I always direct an enema of the oil of turpentine (with starch) to be thrown into the rectum and retained as long as possible, repeating it as soon as it comes away. The turpentine in this way acts not only as a hemostatic, but also as a most efficient oxytocic. I have never—and I have seen some very severe cases—known this method to fail in securing the complete detachment of the ovum, and arrest of the hæmorrhage. I have frequently removed from the vagina at the same time the sponge and the portion of the placenta.

New York Pathological Society. Regular Meeting, March 10, 1858.
Dr. E. R. PEASLEE, *President.*

[Reported for the MONTHLY, by E. LEE JONES, M. D., Secretary.]

Ulcer of Stomach.—Dr. T. C. FINNELL exhibited several specimens. The first was an instance of *Ulcer* of the *Stomach*, occurring in a married woman, æt. 22, who enjoyed good health until a year since; about which time she experienced some little pain of the stomach, and was unable to retain food for any length of time. Occasionally she would suffer from attacks of vomiting and diarrhœa. She continued in this condition, gradually emaciating, but still able to move around, until 10 days since, when she was suddenly seized with a severe attack of vomiting and purging; collapse succeeded, and she died. Some of the neighbors insinuated that she might have been poisoned by her husband. This accusation led to an investigation.

Autopsy.—On inspection this was observed near the pyloric extremity of the stomach. A round ulcer about the size of half dollar, involving only the mucous membrane, the other tissues seemed to be normal. Around the margin of the ulceration was a considerable amount of vascularity, and the coats of the stomach were much thick-

ened at that point. He considered it a perforating ulcer of the stomach, which had only gone far enough to involve the mucous membrane, and that had the patient lived longer, it would have completely perforated all the coats of that organ.

Dr. PEASLEE, in reply to a question from Dr. F., stated that the most common position for perforating ulcer of the stomach, was in the left half, and in the anterior wall; that it was usually found in females not far from that age. He could hardly suppose a case of poisoning to be localized like that, and the thickening of the walls would indicate that the change had been going on for a long time; and it seems that nature attempted to arrest the progress of the ulcer by these means.

Dr. GRISCOM referred to a case in the N. Y. Hospital, which had been diagnosticated as ulcer of stomach by his predecessors on duty; the symptoms were, for 17 or 18 months pain in epigastrium and vomiting, no excitement of pulse, failing but not losing flesh rapidly, *æt.* 25. The patient vomited almost constantly up to 10 days ago, being unable to retain anything upon his stomach but the blandest food. A few days ago, in examining the abdominal region, he discovered a lump in the left iliac region, in the neighborhood of the cæcum. He could not account for it in any way, except that it might be a scirrhus formation, in a very unusual place. Suspecting it might be feces, he directed an injection of warm water to be administered, which was followed by the passage of a great mass of scybala. Injections were administered three or four times afterward, which were followed with the same result. At length this lump entirely disappeared, and the patient assumed a different aspect. He had been treated previously with sub. nit. bismuth, issues, &c. The diarrhœa has entirely ceased, and the bowels are beginning to act regularly. He now retains his food entirely, vomiting having ceased altogether. The symptoms of ulceration, which in this case appeared to be so marked, disappeared very rapidly under the simple treatment of purgatives.

Dr. PEASLEE asked if any member of the Society had seen or heard of any perforating ulcers of the stomach occurring in a male.

Dr. CAMPBELL stated that he had a case in a gentleman, 63 years of age, who had disease of the heart. He stated that during life the patient gave no evidence of any trouble about the stomach that would lead one to suspect ulceration. It was true he had vomiting, but it ceased after a day or two, and was of no marked character.

Dr. PEASLEE would doubt the existence of ulceration of the stomach, unless symptoms be present that could be referred directly to the

stomach; for example, the peculiar sensation after taking food—the difference in the character and severity of pain, while in the sitting or recumbent position. It is an interesting fact, that it occurs more frequently in females about the age of 30.

Gunshot Wounds of Bones of Face and Cranium.—Dr. FINNELL exhibited portions of *bones of the face and cranium* from a negro woman who was murdered in 28th Street. She was shot in the left eye; the ball passing through the orbit, across the base of the brain, and lodged a little above the lobe of the right ear. The bullet is very much flattened. At the coroner's inquest he was asked whether the case was one of murder or suicide. He thought she was shot by some one else; for if she shot herself she would have to carry the pistol round to her left side. If the person was left-handed he could not see how the shot should have taken that direction, unless the pistol was held high up and in a very awkward position. Again, the pistol was found some 10 or 12 feet from where the body lay. With such a character of wound, he should hardly suppose she would have strength enough to throw the weapon that distance. She would be more apt as she fell to let the pistol simply drop.

On examining the room and fixing the furniture, he was satisfied that she was sitting at breakfast while the husband fired the pistol across the small room, (8 feet,) and as the charge went through the left eye she turned around. She did not fall upon the ground, but against the door, against and around which was blood; the spattering seemed to indicate that she leaned against it sometime, then fell down upon the floor.

Traumatic Tetanus.—Dr. F. next presented an instance of *traumatic tetanus*. The specimen consisted of a *portion* of the *frontal bone* taken from a man who was injured by a pitchfork in a quarrel with one of his neighbors. The injury was a little above the orbital ridge. It will be seen that there is a fragment of nap in the indentation from the hat. This nap remains after a thorough maceration, so powerfully must it have been driven in. On looking on the internal surface of the bone there is a corresponding depression, and a sharp spiculum of bone that projects in upon the membranes of the brain, producing irritation there. After the infliction of the injury the man was able to go into the house, complaining of a severe pain in his head, which lasted a day or two and subsided, and nothing more was thought of it. At the end of the second week he again was afflicted with severe pain in the head, and the opening in the integument which extended down to the bone began to discharge pus. He complained of a great

deal of pain around the point of injury. At the end of the third week he began to show symptoms of tetanus, which continued ten days. The rigidity first commenced in the muscles of the neck, then in the jaw, until the symptoms were those of well-marked tetanus, from which he died.

Autopsy.—I found the opening corresponding to the depressed portion of bone through the integument. I expected to find some evidences of inflammation, but there was none going on at that point. The brain was healthy. It seemed to me that this spiculum of bone by irritation alone had produced tetanus at the end of three weeks after the injury.

DR. GRISCOM thought that it was very uncommon to have tetanus follow injury to the brain.

Aneurism of Axillary Artery—Ligature of the Subclavian Artery. DR. J. S. THEBAUD presented a specimen of *aneurism of axillary artery* with the following history: David Butler, a colored man, aged 49 years, by occupation a chimney sweep, entered the Colored Home Hospital on the 8th January, 1858.

His health had been good until about three years ago, when he discovered a small lump in his right axilla, which he caused frequently to disappear by pressure with his hand. This continued about the same until a year ago, when it increased in size, and became painful, but did not prevent him from following his occupation until within the last six months, since which time it has increased rapidly up to the day of his admission to the hospital.

During the progress of his disease he had several times called upon a physician, who had bled him from the arm, which somewhat diminished the tumor and relieved the pain.

At the time he entered the hospital the tumor had attained an immense size, occupying the axillary region, extending over the chest to the edge of the sternum, and upwards along the clavicle, pushing the scapula backward, and crowding the shoulder upward and outward to such an extent that the top of the tumor was on a line with the upper edge of the ear.

The arm had been useless for two or three months, was more than twice the size of its fellow, and was supported outside the bed by means of a bench and pillows. The pressure of the tumor against the head of the brachium was so great as to crowd it away from the glenoid cavity. Much doubt existed as to whether the pulse could be felt at the wrist on the diseased side; nor could the pulsations of the

subclavian artery be positively determined in the usual region above the clavicle.

The tumor was uneven in shape, hard in some spots, soft in others, with an elastic fluctuating feel; a plate placed upon it was distinctly seen to rise and fall, while a sawing sound, synchronous with the heart's action, was heard on the anterior portion, inaudible anywhere else; pressure above the clavicle could not fully arrest the sounds. The pulsations of a large artery were very distinct, and seemingly superficial (over which the sawing sound was also heard) in that portion of the tumor nearest the middle of the sternum.

On the 26th January a consultation was held of the surgeons of the institution, and some of the New York Hospital were invited to join and give in their counsel, of which Drs. Buck, Van Buren, Parker, Halsted, and Markoe were kind enough to be present and render their valuable services.

The case was examined with the utmost care; opinions varied as to the nature of the tumor, between aneurism malignancy or a combination of the two, but it was unanimously resolved that an attempt should be made to ligate the subclavian artery at any point at which it might be reached; the doubt as to the practicability of the operation arising, from the deformity occasioned by the tumor crowding the shoulder and clavicle so far upwards.

The patient was put under the influence of ether, and I succeeded in tying the subclavian artery, just without the scalenus muscle; not more than an ounce or two of blood was lost.

Soon after the operation he recovered from the effects of the anæsthetic and asked for something to eat, at the same time complained of pain in the posterior part of the tumor.

He was properly nourished and stimulated, but to no effect. In 10 or 12 hours he began to sink, and died from simple exhaustion 25 hours after the operation.

The small artery which was felt on inside of tumor proves to be the sub-clavian. The artery at this point seems suddenly to expand, to lose itself, and at this point to resume its normal calibre and situation. The artery is subjected to a very sudden and abrupt expansion. The internal surface of the os brachii, scapula, ribs, and all the bones coming in contact with the tumor, are denuded of their periosteum. It can be seen how the clavicle and scapula are pushed out of their normal positions. He asked if it was common to find this sudden expansion in aneurisms.

DR. GOULEY referred to a case of aneurism of the axillary artery

presented to the Society some years ago by Dr. Isaacs; the expansion was so abrupt that he likened it in its appearance to a ball with a stick driven through it. The aneurism was not so large as in Dr. Thebaud's case.

DR. THEBAUD.—In my specimens three of the ribs are partly absorbed; there seems to be a fracture of one of the ribs, which is rather singular.

DR. FINNELL.—That would seem to point to some injury as the cause; and it might, after all, be a traumatic aneurism.

DR. THEBAUD.—The pulsation of the artery which led us astray was the sub-clavian; by those who supposed it to be a malignant tumor, it was thought that this was one of the large vessels that supplied blood to the mass; and we never had an idea that it was the sub-clavian, inasmuch as we could only trace it to a point where it seemed to dip down into the tumor. No arrest of the sounds could be effected by pressure above the clavicle, which would only be upon a part of the tumor itself.

Cancer of the Rectum.—DR. B. W. MCCREADY read the following history of a case of *cancer of the rectum*:

I was called to see Mrs. P. for the first time about two years ago. She was at that time 71 years of age, pale, presenting no marks of emaciation, and moderately active in her habits; for 5 or 6 years, according to the account which was given me, she had suffered from what was termed a chronic dysentery. There were frequent stools, consisting generally of nothing but mucus, more or less tinged with blood; together with this, there would be sometimes feculent matter of moderate consistency; she suffered a good deal from tenesmus and pain, which was referred mainly to the lower part of the rectum, though she complained sometimes of pain in the upper part of the abdomen. The appetite was good, the tongue clean, and the pulse normal; no history of an acute attack of dysentery could be obtained. To guard against the presence of retained fecal matter, mild laxatives were administered, which produced copious feculent stools, but without any decided relief to the symptoms. A rectal examination being acceded to, after some difficulty, the finger, a short distance beyond the sphincter, encountered a firm, cartilaginous ring, which readily admitted its tip; but any attempt to force seemed attended with great pain dependent from this ring; several ovoid-shaped tumors about the size of a large hazel nut hung free in the cavity of the rectum.

I was again called to Mrs. P. about six months back; during the interval a considerable change had taken place in her symptoms.

She had lost flesh and strength; the skin had assumed a straw-colored tinge, and the appetite was impaired. She told me that for some time back she had passed both flatus and she believed feculent matter from the vagina. On examination, the neck of the uterus was readily found, but the os appeared to be carried backward and lost in the recto-vaginal septum; no communication between the rectum and vagina was discovered, but there was ample evidence of the presence of feculent matter in the vagina. The examination, owing to the reluctance of the patient, was hasty and incomplete, and no rectal examination would be submitted to. Mrs P. died, exhausted, on Tuesday, March 2nd.

On post-mortem examination, the abdomen alone was opened. The peritoneum presented marks of recent inflammation: the liver not much enlarged; showed numerous cancerous tubera; some of these, when cut into, proved diffuent. The rectum terminated at it; lower part terminated in a kind of cloaca, including the upper part of the vagina, the walls of which were formed by the thickened tissues of the surrounding parts. They were of a dirty slate color, presenting no trace of the original texture of the parts. In the anterior wall, and on its level, was seen the os uteri. The stricture had entirely disappeared. On microscopical examination, no cancerous elements were discovered in the walls of the cavity; they consisted mainly of fibrous tissue, with some of the muscular elements of the intestinal wall.

DR. PEASLEE thought this a singular termination of schirrus of the rectum, though he could not believe there should be any doubt as to its schirrous character.

DR. MCCREADY asked Dr. Clark if he knew of any case where cancer destroyed itself?

DR. CLARK referred to what is called corroding ulcer of the uterus, which, by some, is regarded as cancerous, in which all the diseased mass is ulcerated away; he thought this to be a similar case, in which the cancerous mass had destroyed itself by ulceration, but developed it secondarily, as was seen by the condition of the liver.

DR. SANDS, in answering a question from Dr. Peaslee, stated that he had examined the walls of the gut for evidences of cancer, but discovered none; there was only some hypertrophy of the muscular coat of the intestine. Examining the liver, he found abundant evidences of cancer. The cells were very well characterized, especially where they had existed for a time.

DR. MCCREADY.—Some of the deposits in the liver were entirely fluid. On introducing my finger into the rectum, there could be felt a firm ring, and by pressing against it with a little firmness I caused

the patient to shriek with pain, and I had to desist; at that time defecation was attended with intense pain. After a while, it was passed without any particular distress being caused, while cancerous cachexia was developing itself in the general system. It is one of those cases where it is necessary to bring to bear all the methods of diagnosis at our command. It had been put down as an ordinary case of chronic dysentery.

Regular Meeting, March 24th, 1858.

Fibroid Tumor of Brain—Convulsions. DR. T. G. THOMAS exhibited an instance of *fibroid tumor between the anterior lobes of the brain*. Ann Lusticiá, æt. 42 years, England. Her history is unknown up to four months ago, when she was admitted to the Work House. Since here, has been subject to convulsions, supposed to be epileptic, and has had three previous to her last attack. These would last for fifteen or twenty minutes, after which she would remain dull and stupid for twenty-four hours or longer.

Monday, 15th inst., about 3 o'clock, P.M., while sitting, reading a letter, she was seized with a convulsion and fell from her seat. She was placed in bed, and in fifteen or twenty minutes seemed to rally from the attack, but was immediately seized again with convulsions; these continued at intervals of fifteen or twenty minutes for twelve hours, when death ended her sufferings. The symptoms at first indicated epileptic convulsions, but soon evidences of compression of the brain showed themselves. The pupils became dilated, fixed, and insensible to light. The breathing stertorous; the lower extremities paralyzed; and the urine and feces were passed involuntarily. The pulse was feeble and intermittent.

Wet cups to chest and back of neck were used, without giving any relief.

Post-mortem twelve hours after death. On removing the calvarium the membranes of the brain appeared congested. The dura mater being pierced, about eight oz. of serum poured out. In the right hemisphere anterior lobe was found the tumor, about the size of an egg, and round as seen in the specimen, between the dura mater and arachnoid, and was attached to the bony excrescences of the calvarium, and adhered to the dura mater. The lungs were normal, as also the heart, liver, &c.

Synovitis of Knee—Amputation of Thigh—Death. DR. T. C. FINNELL presented a specimen of *disease of knee-joint implicating the bones—amputation of thigh—death*. The patient, a young man æt. 19, two years since injured the knee-joint. Synovitis followed, which terminated in suppuration of the joint. When seen by Dr. Finnell, he

was very much reduced. A consultation was held and removal of the limb advised. This was done, and everything went on well until within the last two weeks, when the discharge increased in quantity, and he sank and died.

On inspection, the heads of the femur, tibia and patella are seen to be eroded. The joint was destroyed by the abundance of pus in the surrounding parts. The patient had no evidences of lung disease.

Perforating Ulcer of Stomach. DR. FINNELL then presented an instance of *perforating ulcer of the stomach*, occurring in a young woman 18 years of age. For the last eighteen months she complained of pain in the stomach and abdomen, but still was able to attend to her duties as servant, until four months since, when, her strength failing, she was obliged to leave off work. Returning home to her friends, she was still able to be about, complaining of general weakness and severe palpitation. She continued in this way until two days ago, when she was suddenly seized with a severe pain in the abdomen and head. She gradually became comatose and died.

Autopsy this afternoon. Body not much emaciated. The skin was of a peculiar light yellow color. On laying open the abdomen, the stomach was found in a puckered condition at its lesser curvature, where was situated a perforating ulcer—adhesions having taken place between that part of the stomach and liver, thereby preventing general peritonitis.

Wound of Right Ventricle. DR. HUTCHINSON exhibited a specimen illustrating *wound of the right ventricle*. The man from whom this was taken received a wound from some sharp instrument, this day week. The external wound was situated two inches within the left nipple, within about half an inch of the sternum, passing downwards, backwards, and inwards towards the sternum. He ran out of the house in which he was stabbed, some fifteen paces, fell and expired after the lapse of *twenty minutes*.

The *post-mortem* was made by Dr. Geo. Cochran, to whom he was indebted for the specimen. The pericardium was filled with semi-coagulated venous blood.

DR. DALTON observed, that twenty minutes is a long time to live after the reception of such a wound. It occurred to him whether such a wound in the left ventricle would not be followed more speedily by death, than in left side. He believes that there are no instances of aneurism of the ascending arch bursting into the pericardium, that death does not occur instantaneously. In both cases it seems to be owing to the arrest of the heart's action. The delay in this case seem-

ed to him remarkable, and he asked if any of the members had seen a similar case.

DR. HUTCHINSON referred to a paper upon this subject, published some time ago by Dr. Purple, in which death in some of the cases related was even longer delayed. In one case it was six or seven years, caused by a shot in the right ventricle.

DR. DALTON.—In these remarkable cases, was there a free opening between the cavity of heart and pericardium?

DR. HUTCHINSON.—In one case the wound cicatrized, and the patient died of some other disease.

DR. DALTON.—That may be the case when the wound is oblique, by which means a valve is formed, which closes up the opening completely. He noticed this in the lower animal quite often, where a wound five-eighths of an inch long was going to be closed up in that way.

DR. THOMAS referred to a case that came under his observation six years ago, in Charleston. Two young negroes got into a difficulty—one stabbed the other in the chest. The man who was struck said he was killed, and sat down in a chair, afterwards he walked a quarter of a mile before he dropped down dead. The direction of the wound was oblique.

DR. DALTON.—Was the wound sufficiently oblique to account for the delay?

DR. THOMAS.—The physician accounted for it in that way. He recollects a case that was presented to the Society by Dr. Van Buren some time ago. A man in New York Hospital received a wound in the heart from a bayonet, and lived nearly a week after. He died suddenly.

DR. DALTON believed in that case the wound could not have passed entirely through the ventricle, but only through about two-thirds or three-fourths of its substance, and that afterwards the remaining part gave way.

DR. HUTCHINSON.—In the paper to which I referred, it is said that the wounds of the left side of heart are less speedily fatal than those on the right—owing doubtless to a peculiar arrangement of the muscular fibres of that side.

DR. PEASLEE.—It seems to me that there are two or three elements to be taken into account. In the first place, if the artery is ruptured at the commencement of the ascending aorta, the blood there is poured through an opening which has no contracting power. At every contraction of the left ventricle the blood will be very sure to find its way through the opening. If of any considerable size, it must very

soon fill it up; but if the wound is oblique, as Dr. Dalton suggested, the very contraction of ventricle might close up the wound. It seems to him this might be the case, even if not oblique. The force of contraction might be sufficient to close it. On the right ventricle the case is different; in fact, sometimes we can hardly tell whether the wound is oblique or not, the walls are so thin. This question is certainly of very great importance in connection with the murder of Dr. Burdell. According to some, it was considered impossible that he should with a wound of the heart have arisen and walked to the door, although there were evidences of this fact in the spots of blood upon the floor, against the door, and on the ceiling. This is one of the facts that would go to show that it was possible.

Tubular Pregnancy.—DR. HUTCHINSON next exhibited a case of *tubular pregnancy*. It occurred in a female 30 years old. She was the mother of three children. At 5 o'clock the other afternoon, she was taken with fainting spells; she supposed herself three months pregnant, and was seen by a physician soon afterwards, who found her vomiting, &c. She remained in a fainting condition during the night, and was in that state at 8 o'clock in the morning, when he saw her. She had a blanched appearance; her extremities were cold, and there could be felt no pulsation at the wrist. Did not complain of any pain, though towards the last there was some tenderness of the lower portion of the abdomen. She died soon after.

Autopsy eight hours after death. We supposed she had died from hæmorrhage following rupture of the right fallopian tube. We could not refer it to any other cause. We found, on laying open the abdomen, a quart of blood in the cavity of the peritoneum, and a rupture of the right fallopian tube at about its middle portion. It can be seen enlarged considerably at the place where the fœtus was situated. The cord was hanging through the opening into the fallopian tube, and also the umbilical vesicle. A corpus luteum in right ovary is very distinctly marked.

DR. FINNELL presented a somewhat similar case to the Society some time ago, removed from a prostitute. It was situated in right fallopian tube, also. She died of internal hæmorrhage. The amount of blood effused was very great; the whole abdominal cavity seemed to be filled with it. The fœtus was enclosed in a large sac; the amniotic fluid was as clear as water. The fœtus was a little larger than the one here presented. She was said to have been delivered of a child at full term; if this were true, there would have been double pregnancy—one in uterus and one in the fallopian tube.

Abortion Hydatids. DR. JOHNSTON presented portions of the product of abortion. The lady from whom this was taken, aged thirty-five, had two children living, between whom she had a miscarriage about three and a half years ago. On the first of January last, she supposed herself three months gone. After attempting to lift a sick friend she was seized with floodings; this was soon checked. She, however, about two weeks after felt life very evidently, and for three weeks after was free from flooding, until about two or three weeks ago, when hæmorrhage recurred. Since then she has passed blood several times. Notwithstanding all this she said she felt life, and it was hoped that she would get through. On the morning of 23rd Dr. J. was called about four o'clock. The patient had suffered pain all night, and was bleeding pretty freely. By the time he reached the bedside flooding had ceased; pain was intense—pulse, 120. Her skin was warm, and she seemed to feel strong, but she had lost a great deal of blood. The pain in the abdomen and loins was so intense that he could not make an examination. About eight o'clock this mass came away. He found it to be hydatids, about a pint and a half in quantity. He presented the specimen in order to ask if this state of things could not be diagnosticated at an early stage, and thus save a vast amount of trouble and annoyance.

DR. FINNELL remarked that he had made an autopsy of a lady whose history was somewhat the same as in this case. She supposed herself pregnant about three and a half or four months. Flooding came on after exertion. It was very profuse and alarming. Several medical men were in attendance, waiting for the expulsion of the child; a large amount of hydatids made their appearance. These were not suspected to exist up to the moment of delivery. She died a week after, with pneumonia.

DR. SABINE asked Dr. J. if there were any frequent gushings of water. He had two cases of that sort in which this symptom occurred. He believed this to be one of the symptoms.

DR. JOHNSTON.—The only gushes she had were pure blood.

DR. PEASLEE thought it a point of some interest, whether such a production is to be regarded as a product of conception.

DR. CLARK did not have much doubt about it. He thinks it pretty fairly settled in the affirmative, inasmuch as it can be formed of nothing but the chorion, and the chorion can be formed of nothing but the fœtus.

Cancer of Spine. DR. H. B. SANDS exhibited an instance of *encephaloid disease* of the spine. The particulars of this history are some-

what incomplete, but are as follows: This patient sprained his back in attempting to lift a heavy piece of timber in June last; the only evil consequences at the time was the passage of bloody urine, and a certain amount of lameness. He continued to work, occasionally suffering pain, until December last, when he was obliged to leave off work. Two physicians were at that time called to see him, and found him suffering from acute meningitis of the cord. He was prescribed for accordingly, and the disease abated in severity, but still he was unable to resume his occupation, and he remained confined to his room until two weeks ago, when, in attempting to go to the water closet, he was seized somewhat suddenly with paraplegia. Previous to this time he had no paralysis, but a severe pain in the lower extremities. He remained paraplegic until his death, which was a consequence of exhaustion.

Autopsy.—The portion of spinal cord two inches above, and including the cauda equina, was shown.

There was nothing abnormal except a very beautiful vascularity of the parts. Within the theca was a very large accumulation of serum, which distended the canal and made pressure upon the cord. The bony walls presented a marked appearance of disease; the disease being confined to the sacrum and lumbar vertebræ—most marked in the former. The bones were softened, yielding to the pressure of the finger nail; the softening affected the bodies; they were porous, and infiltrated with a fluid looking like the mixture of blood and pus, but under the microscope no pus was discovered, but cells mostly round, 1-1000 or 1-1500 of an inch in diameter, each having a nucleus from 1-4000 to 2-5100 of an inch in diameter. Besides, there were free nuclei that looked very much like globules of pus, but they did not dissolve on addition of acetic acid. The microscopic appearances agree with those noticed in encephaloid disease at this point. There was also fungous growth in duodenum, colon, and also at neck of the bladder. What makes it probable that the disease was malignant in spinal cord was that the appearances of the growths elsewhere had the same characteristics. The kidneys were not known to be diseased—they furnish very pretty specimens of granular degeneration. The left is very large and right very small. The microscopic appearances are those usually met with in Bright's disease.

Fatty Degeneration of the Heart.—DR. E. R. PEASLEE presented a case of *fatty degeneration of the heart*. The patient, a cook, æt. 40, was attacked very suddenly last Friday morning, and he was sent for in great haste. She had intense pain in the epigastric region, and in

the abdomen generally; had vomited several times, and had a few discharges of a watery character. On examining the contents of the stomach large masses of meat were discovered. She had been eating a large quantity of fresh pork, which she remarked always was accompanied with unpleasant effects. It seemed to be merely irritation of stomach from the presence of this food. She had no tenderness on pressure. Her pulse was rather weak and slow, which he attributed to the intense paroxysms of pain. He directed 10 drops of laudanum to be given, and fomentations to the abdomen until the pain should go off. He also ordered a powder of rhubarb and perchloride of mercury for the pain, and expected to see her well in the course of a couple of hours. He was again sent for two hours afterward, when they said she was dying. She died at 1 o'clock.

Autopsy.—He suspected arsenic in the stomach. No cause of death was found, however, except as seen in this heart. The heart appears to be perfectly well to the naked eye, but examined by microscope is exceedingly fatty. The stomach was congested, and contained about an ounce of blood. The case is interesting in relation to the sudden death and its cause.

EDITORIAL AND MISCELLANEOUS.

— The season has again arrived for the opening of the Winter session in the Medical Colleges throughout the country. In this city the lectures have already begun, by the preliminary courses which usually precede, by a month, the regular course. The season, too, has arrived for the student to determine, if he has not already done so, where he will seek his medical training. The settlement of this question is important to him, and it is well for him to deliberate upon it, seeking that locality where he can receive the kind of instruction which is best calculated to fit him for the active duties of his profession.

The difference between one locality and another consists not so much in the academical training, as in the advantages of clinical instruction, and that school is undoubtedly the best which offers a combination of the two.

It becomes us, then, at this time to show to those who are about entering upon their studies, or are on the eve of completing them, the

great superiority which the schools of New York enjoy in both these respects. This we cannot do in a better and more conclusive manner than by enumerating the various resources for a complete medical education which the student has here at his command.

The medical institutions of New York for educational purposes may be classified as follows: Colleges, private instructors, hospitals, college clinics and dispensaries.

There are three medical schools, each presided over by gentlemen of deserved reputation, and holding positions earned by talent and industry. Each college has its faculty, rich in the means of imparting a thorough education, experienced in teaching, and vieing with each other in offering every facility to the student for pursuing his studies under the most advantageous circumstances. The museums and the dissecting rooms in all deserve especial commendation, while the unfailing sources from which the latter are supplied allow an indulgence in anatomical pursuits, without fear of a scarcity of material. The large, airy, well-lighted, well-ventilated and well-furnished anatomical rooms, divested of any of the revolting accessories which usually cling to such places, suggest to the student's mind a proper observance of the humanities of life, while investigating on the human body the causes of death.

There are quite a number of physicians who receive private students, but of those who are known to devote especial attention to office instruction we may mention Dr. Aylett, who has always been fortunate in having a large class, and who, as a private instructor, has established a high reputation; Dr. Conant, who as Demonstrator of Anatomy at the New York Medical College, and Surgeon to Demilt Dispensary, has had ample experience in public and private teaching; and Dr. Edwards, Clinical Assistant at the College of Physicians and Surgeons.

There are several preparatory schools of medicine, in which students are examined daily upon the lectures of the different schools. The teachers in these schools also give clinical instruction.

Drs. Budd, Bronson and Aigner constitute one of these schools; Drs. Thomas and Donaghe another, and Drs. Sands and Draper still another.

Dr. Bronson is House Physician, and Drs. Thomas, Donaghe and Draper are Attending Physicians to Demilt Dispensary. Dr. Sands is Demonstrator of Anatomy to one of the Colleges; Dr. Aigner, physician to N. Y. Dispensary, and Dr. Budd, District Physician to the Lying-in Asylum.

The positions which all these gentlemen occupy as physicians to some

of our best charities, afford them an abundance of material to give clinical instruction in connection with their office instruction.

Drs. Gouley and Draper, both excellent microscopists, give instruction in this special branch of medical study. Dr. Gouley is microscopist to Bellevue Hospital, and Dr. Draper to the N. Y. Hospital.

The hospitals of New York furnish most undoubted clinical advantages.

During 1857 there were nearly 3,000 inmates of New York Hospital. Two-thirds of these were surgical cases. Gunshot wounds, fractures, dislocations, and such injuries can be studied in the wards of this hospital to great advantage. There is a fine amphitheatre connected with this institution, where all operations are performed, affording ample accommodation to a large class of students. The public visits to the surgical wards are made four times a week, and to the medical wards twice a week.

The admissions to Bellevue Hospital during 1857 reached nearly 8,000. From the very fact that the number is so large, the variety of cases is greater, and its character as a general hospital renders the number of cases in the medical and surgical wards more nearly equal. There is a pathological museum and a large lecture room and operating amphitheatre attached to this hospital. During the winter, clinical lectures are delivered every day at noon, by the members of the Medical Board; and every effort is made by them to render this hospital a valuable school of clinical instruction.

The ease with which both the New York and Bellevue Hospitals can be reached—the first being on Broadway, near the Park, and the latter in the immediate vicinity of the medical schools—is another additional inducement to the student to be prompt and regular in his attendance upon these hospitals.

The Charities which are situated upon Blackwell's, Randall's, and Ward's Islands, with their large number of invalid occupants, are open to the student on certain stated days.

On Blackwell's Island is the Island Hospital, the Small Pox Hospital, and Lunatic Asylum. The first two are under the care of Dr. W. W. Sanger, assisted by a corps of young physicians. In the Island Hospital can be seen all the phases which syphilis assumes, over one-third of the 3,158 patients admitted during the year 1857 presenting some form of this disease.

At the Lunatic Asylum, which is under the medical charge of Dr. M. H. Ranney, the 900 patients—the number treated during the last

twelve months—afford a great opportunity to study the different manifestations of mental and nervous diseases.

At the Nursery Hospital, on Randall's Island, under the care of Dr. Whittlesey, there were, in 1857, 1,500 little patients afflicted with the class of diseases common to children. This hospital, and the Child's Hospital and Nursery in the city, permit a study of disease in the young patient which is rarely obtained in this country.

The immense immigration to this country, naturally seeking this city as the port of entry, throws a large number of this class into the Emigrant's Hospitals, under the Commissioners of Emigration. These are situated mostly on Ward's Island, and in years of large immigration the number is proportionally large. We have no report by us later than 1854, when the Medical Board reported a total of 29,667 cases—13,806 in the Refuge Department, and 15,861 in the hospital proper; 4,500 of the latter number were in the surgical wards—the remainder in the medical wards. Since then, the number has diminished somewhat with the diminution of immigration, yet the sum total remains very large.

There are several other hospitals, whose reports we have not at hand, and therefore can give no positive data of the total yearly number of their inmates. They would greatly increase the number of our native and foreign population that seek medical advice in our public charities. We mention the names of some of them, more to indicate their existence than to designate them as institutions affording clinical instruction to students: St. Luke's, St. Vincent's, the Jew's Hospital, Colored Home, &c., are among the number.

In addition to the hospitals, are the clinics at the colleges, the dispensaries and infirmaries. Each college gives medical advice through their clinics to at least 2,000 patients yearly. Upon clinical days lectures are delivered by the clinical professors upon the cases which are present.

New York has five dispensaries, and two eye and ear infirmaries, collectively distributing medical advice and dispensing medicine to more than 150,000 patients annually.

In three of the dispensaries clinics are held; by Dr. Cammann at the Demilt and Northern, and by Dr. Corson at the New York—both on diseases of the throat and chest—and by Dr. Briddon, on Surgery, at the New York. These dispensaries are the largest, and together report over 100,000 patients.

At both of the Eye and Ear Infirmaries clinics are held during the winter. Drs. Stephenson and Garrish lecture on diseases of the eye

at the N. Y. Ophthalmic Hospital, fall and spring; and Dr. Agnew, in the spring, on the same subject at the N. Y. Eye Infirmary.

The latter institution presents, in its new building, superior advantages for clinical instruction. There is an operating amphitheatre capable of accommodating 150 students, and the number of patients is large. The report for last year shows a total of 3,216 treated for diseases of the eye, and 250 for diseases of the ear. The number treated at the Ophthalmic Hospital was 1,200.

The charities already enumerated will suffice to show the great resources of New York for clinical instruction. With teachers on every side, and this abundance of material at their command, we are safe in saying that New York is superior to every American city in its clinical advantages.

— A suit has been commenced, as we understand, by Dr. Morton, who claims to have discovered that sulphuric ether is an anæsthetic, against Dr. Charles A. Davis, the physician to the U. S. Marine Hospital at Chelsea, Mass. It is for an infringement of his *patent* for the use of ether, the damages being laid at 5,000 dollars; and although we do not believe the patent can be sustained, Dr. Davis must be put at a large expense to defend the suit. To say nothing of such a course, it is scarcely in good taste for Morton to enter upon it at the same time that he is whining around the profession in New York, and begging for their money and influence to enable him to make up a sum of *ten thousand* dollars for his pocket. Query, why should Morton select as the one to be sued, Dr. Davis, a gentleman who is making his own way without the assistance of wealth, passing by the Warrens, the Bigelows, and the other rich physicians of Boston? Does he intend to sue every surgeon who has used ether, or does he intend to pick up a little black mail from the poorer ones only? We trust the gentlemen of this city, who have been persuaded into an endorsement of Morton, may have their eyes opened as to the real character of the man and his purposes. Has he engaged not to *sue* them?

— The importation of pharmaceutical preparations from Paris seems to become more common and frequent, and if they continue to be received with favor, will doubtless be still more extensive. There are several reasons why they should be valued by us, not the least of which is the fact that the rules governing the dispensing of drugs are much more rigorous and much better enforced in France than in this country, and we suppose every one will admit that no branch of trade requires so constant a supervision as that carried on in drugs. The

impossibility of otherwise securing purity in them seems to be generally acknowledged. Our thoughts have been carried in this direction by receiving a sample of Bugeaud's "toni-nutritive wine," imported by Ward & Simonin, of this city. This is a pharmaceutical combination of malaga wine, peruvian bark and cacao. The latter drug is daily attracting more attention as a tonic and adjuvant in the general nutrition of the system, and can therefore be beneficially associated with the peruvian bark and wine. This, too, is the only reliable preparation of it in market with which we are acquainted. As combined in this preparation the whole is agreeable to the taste, and can be readily administered to the most fastidious. It would be well adapted for the use of those who find themselves suffering from the effects of exposure to the malarious influences of different regions, and are annoyed by the languor and lack of spirits which they often induce when not sufficiently potent to break forth in a more open manner. It is worthy of note that the "toni-nutritive wine" has been commended by the Section on *Materia Medica* of the N. Y. Academy of Medicine.

— Our constant readers will remember an interesting paper upon Chloroform by Dr. Squibb, published in the MONTHLY more than a year ago, in which the purity of different samples was spoken of at length. Among the few that indured the test to which they were submitted was that of Messrs. Duncan, Flockhart & Co., of Edinburgh, and this is, in fact, the only one from a source sufficient to supply an extensive call for it. Before Dr. Squibb's report, and since, we have used this chloroform with every satisfaction, and are convinced that the profession generally would be pleased with the change if they allowed it to take the place of the impurer varieties. It should be borne in mind that it is the impurities which give rise to the dangers in the use of chloroform, or at any rate, to most of them, and therefore a slight increase in the cost of the anæsthetic can be no excuse for not employing it. Messrs. Shedden & Neergaard, of this city, deserve the thanks of the profession for their endeavors to keep constantly on hand a good supply of this chloroform. We urge upon all a careful trial of it, and especially those who still cling to the more disagreeable and irritating sulphuric ether. The only excuse for employing this latter agent, its alleged greater safety, would, we believe, be entirely done away with by using the chloroform of this manufacturer.

— At Binghamton, in this state, on the 24th of September, the corner stone of an institution, so far as we know unique in its purpose, viz., the care and cure of inebriates, was laid with the usual ceremonies. A large collection of people was drawn together, and several distin-

guished men were among them. Of the addresses we have only seen that of Dr Bellows, the distinguished Unitarian clergyman, which was repeated in New York on the following Sunday, for the report of which we are indebted to the *Daily Times*.

One or two of the passages are worthy of note here, as containing the kernel of the whole matter, and probably indicating the views of its managers.

"What then is the original but ripe principle which this Institution embodies—the new, yet popular policy which it inaugurates? Let us not, by confounding it with other good things of similar association, diminish the distinctness by magnifying the size of our idea, or, by seizing claims on the pre-occupied grounds of other great and kindred interests and policies, forsake the impregnable fortress of its own limited but independent claims to originality. Interest in the intemperate, thank God, it did not remain for us to arouse. The evil of drunkenness, the perils attending the use of alcoholic stimulants have awakened the conscience, alarmed the fears, animated the moral efforts, engaged the devoted and continuous labors of our whole people for a quarter of a century.

"Our country, for thirty years past, has been giving, in almost every possible form, the liveliest testimonies to its sense of the vast extent, the terrible ravages, the social and civil calamities, the moral and spiritual evils of intemperance. By legislative enactments and popular associations, through political parties and philanthropic appeals—by a machinery of inconceivable magnitude, universality, activity and zeal—by the erection of what may be considered a new social code—by the banding together of the clergy of the country as one man in proclamation, denunciation and warning of the evil—by private pledges and by Main Law agitation, the people of this country, in its whole moral and religious portion—the people of this state, in its weighty and dignified majority, have given emphatic, continuous, united testimony, in forms that can never again be equalled, because never again required, let us hope, to the public sense of the evils of intemperance. The temperance associations, of every name and order, may be considered as having left nothing to be done, in the way of public expression, respecting the sway and the malignity of the vice of drunkenness. This Institution assumes the existence of this evil, and takes for granted that all are agreed (whatever their dalliance with it may be) in acknowledging its extent and enormity. It recognizes the vast importance, and blesses the precious influence of all the means employed in preventing, suppressing and extinguishing it. It does not claim to be able to take place of any of those preventive or curative processes; it has no discouragement for them, no jealousy, no rivalry with them; on the contrary, nothing but the warmest encouragement, the heartiest sympathy, the liveliest and most friendly emulation.

"But—and herein is the peculiarity—it declares it to be the opinion of the thoughtful, observing and philanthropic men of the state, that a very important percentage of the intemperance of the world, the

country and the state is beyond the reach of any or all the means now employed to prevent, remedy or restrain it; that it owes its existence to constitutional causes, is perpetuated by morbid necessities, and propagated by philosophical laws—which are wholly beyond the reach of moral suasion, political restraint or private control; in short, that inebriety, to an extent sufficient to create an unspeakable sum of personal and domestic misery, of social injury and public crime, is a disease either produced by intemperance, and then perpetuating it, or producing intemperance and then continuing it—a *disease* which requires in the name of public policy, and demands in the name of Christian charity, medical treatment and a hospital; a disease so peculiar, obstinate and distinct, so common, deplorable and injurious, that it demands a hospital *exclusively* devoted to its observation, control and treatment. Between intemperance, a condition of body and mind resulting from excess in the indulgence of natural, the abuse of festive habits, from recklessness of principle, the love of evil company, fondness for pleasure and excitement, and impatience of trouble, care and sorrow, the ordinary and prevailing intemperance of society—intemperance, the exceptional, occasional or frequent vice of those still held responsible for their conduct, capable of self-control, open to argument, to motives and to reform—between intemperance thus known and described, and inebriety—intemperance still, but now a disease, original or superinduced, caused by or causing drunkenness, a disease native to the constitution, or created within it by abuse, a disease because an organic or functional derangement of the system, which bears drunkenness as its necessary flower, as naturally as the ivy root bears poisonous leaves. All the intemperance which arises from disease, they propose, for convenience of moral nomenclature, to name *inebriety*. And inebriety thus pronounced a disease they propose uniformly to treat as a disease, in an asylum. The merely intemperate they pitifully and sadly leave, in all the vast and wretched company they constitute, to the watch and care of the moralists, to the ordinary civil and moral police of society, to the guardianship of parents, the warnings of religious guides, the efforts of the temperance associations, and all the various alliances for their rescue from the powers of temptation and from the fate predicted and procured by their reckless ways and thoughtless minds and callous hearts. They know the inadequacy of these defences and protections; but they know the insufficiency of all efforts to wholly control a vice whose roots are so deeply planted in the moral infirmities, the social ignorance, the imperfect moral and spiritual condition of our race—a vice which civilization, by developing means and opportunities for its indulgence faster than it develops moral apparatus for its control, makes the chief source of the crimes of society without allowing us to hope, for a long time to come, for anything more than a steady, but slow decline in its sway. But *inebriety*, wholly inaccessible to the influences which warn, or protect, or save intemperance—inebriety, a disease—not of the will, or the heart, or the conscience, but of the stomach, the brain and the intestines—a physical, not a moral disease—they propose to take out of the hands of the

teachers, the moralists, and the law, and put into the hands of the doctors—of doctors especially trained to treat it, and with special means and opportunities of treating it; chief of which is the power to restrain and to confine it, for such a term as its due treatment may require."

In reference to the numbers of subscribers, or stockholders, as they are termed, it is worthy of note, that of lawyers there are *four hundred* out of a total as given by the last state census of 4,542; of clergymen *four hundred* out of a total of 4,810, and of physicians *eight hundred* out of a total of 6,010. This would seem to intimate a hope on the part of medical men that it may be possible to gather into such an institution many, if not all, of these cases of habitual drunkenness which are now recognized as arising from disease. Oinomania requires medical treatment as much as suicidal mania, or any other monomania, but it is impossible to conceal the fact that there must be far greater difficulties in consigning its subjects to an asylum. The danger of improper interference with the liberties of individuals under the charge of some other forms of insanity are pretty distinctly recognized, but the difficulties are as nothing when compared with the obscurities in discriminating a case of dipsomania, or deciding when a person is so far inebriated as to justify a permanent or temporary confinement. The whole thing is an experiment which is worthy of being carefully tried, but too sanguine success in its result is not wise, as it may be followed by disappointment.

— At the sitting of the Academy of Medicine, held in Paris, July 20, 1858, M. Trousseau, in the name of a commission, constituted of M. M. Begin, Bouley, Jobert, Larrey, Renault, and himself, read a report upon the different papers upon the Ligature of the Œsophagus, communicated to the Academy since July 29, 1856.

The problem, said M. Trousseau, comprehends a question of fact and a question of interpretation. He would examine both, commencing with the more important, that of fact. What are the phenomena supervening upon the ligature of the œsophagus? Is it true, as advanced by Orfila, that this operation is so simple, and has so little reaction upon the system, that the subjects submitted to it remain unaffected by it, and that its hardly appreciable effects can be neglected without inconvenience in toxicological experiments?

Is it true, on the other hand, as sustained by M. M. Bouley and Reynal, that the ligature of the œsophagus is followed by very manifest functional disorders, which should be estimated in studying the effects of substances introduced into the stomach of animals, upon whom the œsophagus has been ligatured?

As the result of several experiments performed before the committee, and a full examination of the whole subject, M. Trousseau ends his report with the following conclusions:

1st.—The application of a constricting band upon the œsophageal tube is followed almost uniformly by special symptoms, which, whatever may be their cause, are of a character so serious that they should be taken into account in toxicological studies.

2d.—These symptoms are more or less decided as the constriction is more or less tightly drawn.

3d.—Permanent constriction of the œsophagus is fatal in nine cases out of ten.

4th.—The maximum duration of life having been six days, in the subjects of experiment forming the base of this report, it follows that the supposed toxic properties of substances experimented with while the œsophagus was ligatured may be doubted, whenever death does not follow until the 2d, 3d, 4th, 5th, or 6th day of their ingestion, and for a much stronger reason whenever this period is exceeded.

5th.—The symptoms characteristic of a permanent ligature of the œsophagus are those of profound depression, the period of the first twenty-four hours being once passed.

6th.—The lesions following permanent constriction of the œsophagus consist, generally, in inflammation of the nerves which accompany the œsophagus; inflammation with or without the generation of pus in the region where the traumatic action is established; whence this rigorous conclusion, that every toxicological experiment in which this complication intervenes should be annulled as tainted with legitimate suspicion, in view of the impossibility of determining whether in similar cases the fatal accidents result from the substances experimented with, or from inflammation of the nerves of the neck.

7th.—The temporary ligature of the œsophagus is fatal in only 3 7/8 per cent. of the cases, according to the statistics furnished by this report.

8th.—As a general rule, the effects are less serious according as the application of the ligature is less prolonged; whence this consequence, that, in order to simplify as much as possible the toxicological experiments, it is necessary to have the constricting band applied the least possible length of time, taking care to tighten it only to the degree required to prevent the return of articles ingested, but without involving the walls of the œsophagus.

The duration of the application of the band should not exceed six hours, a period in which the substances injected are no longer in the stomach, or have produced there all the effect they can determine.

9th.—Prolonged and closely tightened ligature of the œsophagus can, by reason of the disorders it produces and the fatal accidents following it, make the existence of poisonous properties suspected in substances entirely harmless.

10th.—The ligature of the œsophagus being liable, in exceptional cases, to prove fatal, even in the first hours following its application, one should always be aware of this casualty in performing toxicological experiments, and assure himself, by a careful examination of the nerves of the neck and the respiratory organs, that no lesion intervenes capable of complicating the phenomena; since, in fact, all the causes of death after ligature are not known, conclusions should not be drawn until after repeating the experiments, with the precautions just indicated, and especially without practising the ligature as Orfila did, and as he recommended it to be done, (4th ed., p. 29;) one should have obtained constantly identical results.

The final conclusion of this report is, that M. M. Bouley and Reynal have done well in calling the attention of experimenters anew to the subject of ligature of the œsophagus—an operation often indispensable to toxicological experiments, but of which it was wrong to exaggerate the harmlessness.—*Gazette Hebdom.*

"*Universal Douche.*"—Dr. A. M. Adams, upon a late visit to the Continent, speaks of an ingenious bath, devised by Dr. Molewater, of the Rotterdam Hospital, and terms it the "*Universal Douche.*" The patient stands in a hollow niche in the wall, and parallel with his spine rises a central tube perforated with many apertures; while this tube is crossed at right angles by upwards of a dozen semi-circular tubes, similarly perforated, having thin concave surfaces towards the bather. A powerful stream of water is then turned on, and from all these perforated tubes, as well as from others below, the patient is enveloped in a perfect whirlpool of water, which lashes against his body in every direction. This form of bath is found to possess immense tonic influence in various atonic and hysterical complaints.—[*Edinburgh Med. Journ.*

—Dr. JAMES B. McCaw, one of the editors of the *Virginia Medical Journal*, has been elected Prof. of Chemistry in the Medical College of Virginia, that chair having been vacated by the resignation of Prof. Martin B. Scott.—*Boston Med. and Surg. Journal.*

Quinine in Scarlet Fever.—Dr. E. A. Morrison, of Lawrenceville, Brunswick Co., Va., has an article in the *Virginia Medical Journal*, in which he extols this new method of treatment. He has treated this disease repeatedly in epidemic form, for more than thirty-five years, and thinks he has met with the greatest success from the powers of quinine. He relates several cases where it had the happiest effects, though the disease presented itself in a very malignant form.

He treated about twenty cases in one family, and all recovered but one, to which he was called at the last moment.

When the first symptoms make their appearance he orders quinine, regulating the dose according to the age, and continuing every two or three hours until under its influence, occasionally giving a few grains of blue mass, to gently relieve the bowels, and mopping the throat with a strong solution of the nitrate of silver. He also, when the patient is old enough, directs a gargle of red pepper tea and common salt.—*Med. and Surg. Reporter.*

Pepsine in the Obstinate Vomiting of Pregnancy.—The *B. and F. Med. Chir. Rér.* copies from the *Bullet. Gen. de Thérapeutique* an article by Dr. L. Gros, in which he relates the remarkable effects of pepsine in these vomitings. In several cases every method of treatment had failed, and he even thought of abortion as the only chance for the woman's life. He gave about one scruple in two doses, to be taken daily, in broth. This being retained from the first, it was continued, and gradually more powerful nourishment was given. At the end of three weeks the case was complete, and from that time all went on well. This was a sample of all his cases. He explains it, "by supposing that, although in the first instance the vomiting is due only to the sympathy existing between the uterus and the stomach, yet subsequently the stomach itself becomes affected, and is proved by the fact that in the beginning of pregnancy the vomiting occurs only in the morning or evening; but in aggravated cases it supervenes after every meal, and all alimentary matters are rejected. In such cases, therefore, when the stomach has taken on a morbid habit, and exhibits an alteration of secretion, the pepsine appears to be really indicated; although in a merely sympathetic action of the uterus and stomach it would be difficult to explain the efficacy of its action." While on the subject, we might say that M. Berthe, in the *Bulletin Gen. de Thérapeutique*, recommends the administration of this article in the form of a lozenge, prepared as follows: A firm paste is made in the usual way, with mucilage of gum Arabic, and aromatized with a few drops of essence of lemon. When the mass is perfectly homogeneous, four grains of amylaceous pepsine are added for each lozenge; the mass is then divided in the ordinary manner, and the lozenges placed in a stove heated to from 77° to 88° F." It has been recommended in other forms, but we think this will prove as pleasant and convenient a method as can well be devised.—*Med. and Surg. Rep.*

On Bismuth and Magnesia.—Some medical papers of the Continent have of late been very loud in their praise of these substances, and a peculiar combination of them which has been offered. From such journals as the *Gazette des Hôpitaux*, *Revue Médicale*, *Revue Thérapeutique*, *Union Médicale*, and *Scalpel* (Belgium), we copy the following facts:

Bismuth was long confounded with lead and tin, and had done much mischief in therapeutics from the arsenic and sulphur it contains. The investigations of Stahl and Dufay have elucidated many facts

respecting bismuth; its composition is now well known, hence it has been prescribed, in small doses, by Messrs. Odier (of Geneva), Guersant, Lacnec, Récamier, and others, for nervous affections of the stomach. M. Trousseau and others have, on the other hand, used it in large doses with the best effects. But all practitioners know that bismuth produces constipation after the few first doses, so much so that its use must now and then be suspended.

The problem therefore was, to combine bismuth with a substance neutralizing these binding effects, without interfering with the action of that metal. Calcined magnesia seemed to answer the purpose; but it was found that the preservation of magnesia, deprived of its carbonic acid, is as difficult as to free bismuth of all its impurities.

M. Fayard, a well-known pharmacien of Lyons, has endeavored to minister to the prevailing tendency in France of rendering useful medicines pleasant to the eye, the taste, and the stomach. He availed himself of the formula of Dr. Patterson, of New York, to purify bismuth and preserve calcined magnesia, and then mixed these substances with sugar. Hence were formed the bismutho-magnesian powders of Patterson, possessing all the advantages of these agents, without presenting the drawbacks mentioned above.

These powders have been found useful in cases of dyspepsia with headache, anorexia, and vomiting, especially as regards pregnant women, in flatulence, &c. &c., taken in large doses for six weeks or two months. They have also been successfully administered for certain affections for which they are not habitually given, viz.: 1. For headache connected with derangement of the digestion. 2. In the acid vomiting of children at the breast, depending on the inferior quality of the mother's milk. In such cases the best results were obtained by desiring the nurse or mother to make a change in her food, and to take the bismutho-magnesian powders before or after meals. 3. As absorbents of the unwholesome gases evolved during imperfect digestion. These cases, when neglected, are the first to suffer when cholera breaks out.—*London Lancet. Boston Journal.*

— Dr. A. Mercer Adam has commenced in the Edinburgh Medical Journal some sketches of universities, hospitals, lunatic asylums, and mineral baths of Holland, Belgium, Germany and Austria. We extract from the last paper his sketch of Prof. Vrolik, of Amsterdam, and of the University of Utrecht and its distinguished professor, Schroeder Van der Kolk.

"The medical 'lion' of Amsterdam is undoubtedly Professor Vrolik, the celebrated anatomist and physiologist. Of course I speak of Vrolik the younger; for, though his father still lives, and is in vigorous health, he may now be said rather to belong to history than to be one of the 'Men of the Time.' Accordingly I went to present my letters of introduction to this gentleman, who received me with that frank courtesy, of which my professional brethren in England must entertain pleasing recollections. Vrolik is a tall, heavily built man, with an open

expression of countenance, and very fine dark eyes—possessed of more vivacity than is usual among the Dutch. I spent a very pleasant afternoon in his society, and inspected, along with him, all the valuable private collection of anatomical and zoological specimens which has been accumulated during the joint life-times of his father and himself. This museum is very rich in osteology. The collection of skulls is larger than that of Professor Vander Hoven, of Leyden, and contains magnificent specimens of all the ethnological varieties. Among them is a curious microcephalous skull, which, in several places, is atrophied by the pressure of the cerebrum. A large cabinet is completely filled with illustrations of ankylosis of every joint in the body; and among them are two interesting preparations of perfect osseous union of the symphysis pubis, one of which occurred in a healthy elderly woman, while the other was the result of traumatic inflammation of that part. Another cabinet, equally large and complete, is devoted to specimens of dislocations; among which are some curious preparations of congenital luxation of the femur, showing the increased transverse diameter of the pelvis, resulting chiefly from the strong action of the iliacus internus muscle in this affection. His collection of pelves is extensive, and well selected, containing some interesting preparations showing the various abnormalities and deformities. Among them is a pelvis of enormous size and weight, the largest and heaviest I ever saw, which belonged to an Ethiopian female. But it is especially in preparations illustrative of teratology that Professor Vrolik's museum excels all others that I am acquainted with; for, having devoted a life-time of careful attention to the study of malformations, he has accumulated a good collection, and he is at present the highest living authority on the subject. Such men as he and our countryman, Professor Allen Thomson, of Glasgow, have followed well in the footsteps of Geoffroy Saint Hilaire, and have elevated to the dignity of a science what was formerly a mass of superstitious uncertainty and absurd speculation. A very interesting malformation has just recently been added by Vrolik to his collection, viz., of the variety *Pyrocephalus Syreniformis*, which Vrolik considers quite unique. This seems externally merely a dolphin-like mass of flesh, or rudimentary fœtus with undeveloped fin-like extremities; yet, upon dissection, Vrolik found that it contained a perfectly organized skeleton and viscera. The brain was found to be very large; it was proportionally more developed than any other part, and the larynx ended curiously in a *cul-de-sac*. Another new preparation of great interest is a fœtus, which was born with congenital umbilical hernia, and also a preternatural anus. Instead of being in the usual place, the rectum terminated anteriorly, at the site of the rupture, in two mouths, thus forming a double anus. The collection of double monstrosities is very complete, and the dissections of the xyphophage variety (where the fœtuses are united at the sternum) show that successful disunion by operation is rendered impossible by the fact of their livers being united. In physiology there are also many interesting preparations, especially those which illustrate the recent discovery, made conjointly by Van der Kolk and Vrolik, of the existence of

reticulated venous plexuses surrounding the arteries in the wings of fowls, especially in those which possess great strength of pinion—a provision doubtless designed to facilitate the circulation of the venous blood at times when the veins become forcibly compressed by the strong action of the surrounding muscles. The preparations showing these venous plexuses in the wings of swans and eagles, are very successful and beautiful injections. I did not see the elder Vrolik, as he was from home, nor had I sufficient time to see any of the other medical men of the city, as I was anxious to pass on without delay to the more important medical school of Utrecht.

“As a school of medicine, Utrecht unquestionably stands highest among the Dutch Universities, and the celebrity of several of its living professors has attracted to it much of the attention of the scientific world. The names of Schroeder Van der Kolk, Donders, Harting, and Mulder are very familiar to every student of modern medicine, and the influence of their views have extended to all lands.

“The University of Utrecht is a plain building, which was founded in 1636. It contains a fine hall, which, at the time of my visit, was in daily use for medical and other graduations. At one end of it is a gallery wherein musicians perform during the ceremonies of the graduations, which is gaily bedecked with flags, swords, spears and drums—trophies of the gallant part which was played by the alumni of this college, during the struggle for independence, at the time when Holland was separated from Belgium in 1830, when the students of Utrecht, and of the other Dutch Universities, patriotically enrolled themselves in corps, and fought most valiantly for the defense of their country. Other banners, bearing the arms of Dutch cities, &c., adorn the walls; and high above them all flames the emblem of the University itself, a burning sun, with the motto, ‘Sol Justitiæ illustra nos.’ There are about 400 students, of whom 70 are medical. Each medical class costs about £2 10s. for the session, and the professors, in addition to these fees, receive about £250 each per annum from the Dutch government. In connection with the University there is a very good anatomical museum, chiefly remarkable for possessing a large collection of well executed wax models. The physiological laboratory of Professor Donders is also in the University. It is fitted up with microscopes and other scientific apparatus; among these I observed the most interesting instrument called the Ophthalmotrope of Ruete, which attracted very much notice when it was exhibited last year at the Ophthalmic Congress at Bonn. It consists of a model of the eye, capable of moving exactly as the natural organ, and having delicately arranged silken cords attached to it behind, which act as the muscles of the ball. By means of a graduated scale, and some highly ingenious mechanism, one can see at once, by the lengthening or shortening of each cord, what muscles act in producing every movement of the eye, and to what extent comparatively each of them operates in these processes. The saloons containing Professor Harting’s admirable microscopical collection immediately adjoin Donders’ laboratory. In another part of the town, Mulder, the Professor of Chemistry, has a splendid laboratory, which was expressly built for him.

"Few living physiologists have a wider spread reputation than Schroeder Van der Kolk, the Professor of Anatomy in Utrecht. Though now an elderly man, he still retains all the enthusiasm of youth for the prosecution of physiological science; and when he is talking of his experiments or speculations, he warms with the subject, his manner becomes very energetic, and his face brightens up into a pleasant smile. In appearance, he is a man of about 60 or 65 years—of middle size, with iron gray hair, and a slight stoop, from long study and bending over microscopes. I spent a very pleasant forenoon with him, seeing all his pathological and physiological preparations, about which he discoursed to me most enthusiastically in German. He showed me some finely injected preparations, to illustrate his theory of the non-existence of veins and nerves in the centre of carcinomatous growths, the injection being seen to traverse only the arterial vessels in a section of such a tumor. The pain attending the disease is attributable, he thinks, to the cancer cells entering and destroying the substance of the nerves in the surrounding tissues. We talked a good deal of the celebrated discussion about cancer, which occurred two years ago in the Academy of Medicine of Paris, and he remarked that whatever may be said to the contrary, the microscopical diagnosis of cancer is not to be sneered at as an impossibility. He thinks, however, that in making a histological diagnosis of carcinoma, we should look for the cancer cells in the tissues immediately adjoining as well as in the suspected growth itself. Of Professor Hughes Bennett's 'Researches into Cancer,' he spoke in terms of unqualified commendation; and, in common with all the continental physicians with whom I have conversed, he entertains the highest admiration of the efforts that have been made by Dr. Bennett to establish in England an improved system of medicine, founded on a scientific rational basis, and in which it is sought to reconcile correct diagnosis and successful treatment with the most advanced views of modern physiology and pathology. And all honor, say I, to such men as Van der Kolk, Donders, Kolliker, Virchow, Claude Bernard, Hughes Bennett, and others, for the impetus they have given to the culture of rational medicine. Although we may be unable, as yet, to deduce from *all* their investigations, theories of disease or modes of treatment superior to those which we at present possess, still there cannot exist a doubt that, eventually, all scientific medicine must be established on a rational basis of improved systems of physiology and pathology.

"I have said that Van der Kolk, in his mellow age, has the pleasure of knowing that ere he dies his merits are acknowledged, and his fame European. It is Professor Donders, however, who is now the man of most hope and promise in Utrecht, and to whom, consequently, most of public attention is directed. Like Simpson, Scanzoni, and many other eminent men, he has earned a wide reputation, while yet comparatively young; and his skill as an oculist attracts thousands of patients yearly to Utrecht, to be under his care. Professor Donders is about 40 years old, rather tall, well built, and of very dark complexion; he has a quick piercing black eye, which seems at once to get

at the root of a matter, and he has a frank manner and a winning smile, which irresistibly inspire complete confidence in his skill. He has given an immense stimulus to physiology by his unwearied labors; and his great enthusiasm and his invariable courtesy have rendered him a great favorite with the Utrecht students. The medical literature of Holland is under deep obligations to him; for he was not only one of the principal supports of the *Nederlandsch Lancet*, during the existence of that periodical, but since its decease he and an Amsterdam physician have commenced a new medical periodical, in which henceforth the contributions of the Dutch medical men will be published in German instead of Dutch, as being a more generally understood language."

— In Haarlem I observed, in one or two streets, a curious Dutch custom peculiar to the town, which may be interesting to accouchers. When a birth takes place here a handsome pin-cushion, profusely ornamented with lace, is affixed to the outside of the street door of the house, to notify the occurrence of the event to the public. If a boy has been born the pin-cushion is of a red, and if a girl it is of a white color. A flag of truce is not more respected than this little ensign of millinery work, for as long as it hangs on the door the house is held sacred, and is protected from the approach of duns, bailiffs, or tire-some acquaintances; and even troops, in marching past, must cease beating the drums or blowing their bugles, lest "mother and child" should be hindered from doing well. It is also a common custom throughout Holland, in case of sickness, to append a daily bulletin of the patient's progress, signed by the doctor, to the outside of the street door, so that inquiring friends may read the intelligence without occasioning annoyance to the patient by ringing or knocking.—*Edinburgh Med. Journ.*

— The following statistics in relation to *The Poor in Paris*, are taken from a daily paper:

The administration publishes every year a report of its proceedings. We extract the following from that for 1857: "Paris possesses 16 hospitals for the treatment of diseases, and 12 hospices or places of refuge for the incurable, or for aged paupers. The support of these different establishments requires great resources, and the account for 1857 gives the ordinary receipts at 16,427,117f., and the expenses at 16,132,114f. The ordinary receipts are as follows: Landed property and revenues, 970,928f.; interest of capital, 700,065f.; rents and dividends, 1,417,802f.; eventual revenues, 213,214f.; concession of ground in the cemeteries, 162,181f.; duties on theatres, &c., 1,389,240f.; bonus from Mont de Piete, 259,157f.; reimbursements by families and communes, 3,561,121f.; municipal subvention, 7,207,137f.; revenues and foundations, 546,249f. Total, 16,427,117f.

"At a moment when a fresh circular of the Minister of the Interior has directed public attention to the landed property possessed by the establishments above mentioned, it may not be out of place to quote the following from the memoir addressed to the municipal council by the Prefect of the Seine in presenting the budget of 1859. He says: 'Of the landed properties possessed by the public assistance of Paris some are susceptible of being turned to account, while others are naturally unproductive. Some of the former might be advantageously sold. In 20 years the administration of public assistance in Paris has realized by its sales of landed property 14,022,814f.; before it was sold it only produced annually 287,507f. Out of the above 14,022,814f. 7,087,769f. were invested in the purchase of 302,326f. of rentes, and the remaining 6,885,044f. served to meet the necessities of the service, particularly for the enlargements and repairs of different buildings.

"Other sales to the amount of 6,441,000f. might be immediately made, and the administration of public assistance would still remain the proprietors of productive landed property estimated at more than 22,000,000f.' The receipts from donations were less in 1857 than in 1856, but the duties from the theatres, &c., increased. Out of the amount of 16,132,114f. of ordinary expenses, those of the hospitals stand for 5,362,467f.; the hospices, 5,043,885f.; the Foundling Hospital, 2,343,680f., and assistance at private houses, 2,818,157f. During 1857 there were 21,411 patients treated in the different hospitals, and 19,154 supported in the hospices and asylums. All the patients in the above mentioned list did not belong to Paris; the banlieue giving a contingent of 12,427.

"In addition to the above number of patients treated gratuitously there are many who were in private rooms, and who paid during 1857 a sum of 148,274f. There is also another class who received the aid of the hospitals—the members of the laboring classes, who receive medical and other assistance at their own houses, where they are able to receive the attention of their families. A sum of 2,895,788f. was expended in this manner during 1857 among 33,301 families. The expense per day of a patient in a hospital costs 2f. 27c., and in a hospice 1f. 47c., which makes the expense of each bed 830f. 61c. in a hospital, and 539f. 77c. in a hospice. The consumption of bread amounts to 2,162,133f.; wine, 1,348,468f.; meat, 1,657,317f.; medicines, 677,152f."

Buckwheat Considered as Food. By M. ISIDORE PIERRE. The following are the results of M. Isidore Pierre's investigations on the subject:

"The alimentary preparations made with buckwheat flour form, generally, a wholesome and sufficiently reparatory nourishment; there exists between the two principal kinds of buckwheat flour which are found in commerce a difference of richness in nitrogenous principles, which may be estimated as averaging 45 $\frac{7}{10}$ cent.

The coarsest and least white of the two is the richest in nitrogenous principles, phosphates and fatty matters; this is consequently the most nutritious, and it is thus easy to see that it may form the sole food of

the rural population in some countries. The preparations known as buckwheat cakes form a food which is comparable to the ordinary bread of Paris, as regards the proportion of phosphates and nitrogenous principles which it contains, and which is superior to it with regard to the fatty matters. The general yield of these preparations, when properly cooked, is about three times the weight of the flour used; they contain, therefore, from 40 to 41 per cent. of water; this yield appears to be nearly independent of the mode of preparation, provided the cakes are properly cooked. There may be, between the various products of the grinding of one batch of buckwheat, with respect to their richness in nitrogen, phosphates and fatty matters, such differences, that one contains *nearly seven times as much* NITROGEN, *twenty-five times as much* PHOSPHATES, and *a hundred and fifteen times as much* FATTY MATTERS as another; the coarsest flour may contain *twice as much* NITROGEN, *four times and a half as much* PHOSPHATE, and *two and a half times as much* FATTY MATTERS, as an equal weight of the buckwheat which furnished it; the bran which proceeds from the ordinary grinding of buckwheat is *richer in nitrogen, phosphates and fatty matters* than the whole grain from which it proceeds, and it would be possible by a perfect method of bolting to separate a farinaceous product, which would be much richer in nitrogen, in phosphates, and especially in fatty matters than ordinary flour. As has been observed with ordinary wheat, the finest and most nourishing buckwheat is not that which contains the largest proportions of the principles to which the most importance has been attached for alimentation. The *difference of composition* observed between the various products obtained in grinding buckwheat are *much more distinct* than the analogous difference hitherto found in the products of the grinding of wheat. The following is a portion of the results which have been formulized, with one kilogramme of matter completely dried:

	Nitrogen. gr.	Phosphoric acid. gr.	Fatty matters. gr.
Whole buckwheat.....	21.3	5.6	32.2
Very fine mill dust.....	7.6	0.96	0.62
Ordinary <i>fine</i> flour	13.0	"	"
Average yellow flour freed from } fine white flour.....	38.8	20.6	"
Very coarse yellow flour	55.7	24.3	71.8
Ordinary bran.....	24.4	11.9	47.7
Cortical envelopes of the grain } mixed with a little flour.....	"	"	8.1
Pure cortical envelopes.....	4.9	"	"
Coarse flour freed from the pre- } ceding bran.....	"	"	90.2

Amongst the products obtained during the grinding of buckwheat, there is one which deserves to fix the attention in a very peculiar manner, that is, the fine white mill dust which is intermediary as to composition between the feculas, tapiocas, &c., and wheat flour, and which

for this reason forms a much more substantial food than the first, and much lighter flour than from wheat. This is, therefore, a product whose preparations, under various forms, cannot be too strongly recommended for weak stomachs, and for food for young children, who cannot take substantial nourishment; it gives them, in a form and in the proportions which suit their delicate organization, the various principles which contain all the alimentary substances requisite for the support of the principal functions; and since these researches were terminated, I have had the satisfaction of learning that practice has already justified these theoretical ideas and recommendations; it has been found a wholesome, substantial, and very economical kind of food.—*Journal of Pharmacy from London Chemist.*

New Caustic Paste with Chloride of Zinc and Gluten.—M. Sommé has been led to the employment of gluten instead of flour in the formation of the caustic paste, by observing that the paste was more adhesive and easy to preserve in proportion as the flour which he employed was more rich in gluten. The gluten is obtained from the best wheaten flour, and the chloride of zinc and the gluten are mixed in the following manner: The chloride is placed in a porcelain capsule, and dissolved in alcohol with a gentle heat; then the gluten in powder is spread uniformly over the liquid mass and triturated, so as to incorporate the two substances completely together. This paste is very plastic, and may remain for a long time exposed to the air without liquefying, and it may be handled with impunity, if there are no excoriations on the skin. It may be used in mass, in plates, and in cylinders, the latter form being applicable in the case of deep fistulae.—*Druggists' Circular.*

—The New Sydenham Society are about publishing the following works, as we learn from the local Secretary, Dr. C. F. Heywood, 66 West Twentieth Street:

I.—Gooch, on some of the more Important Diseases of Women and Children, and other papers. Prefatory Essay by Dr. Robert Ferguson. II.—Diday, on Infantile Syphilis. III.—Selected Memoirs on Diphtherite, (Bretonneau, Trousseau, Bouchut and others. IV.—A volume of translated Modern Essays on different medical subjects.

The annual subscription to this society is five dollars, which entitles the member to receive all works issued by the society during the year.

—The *Medical and Surgical Reporter*, until recently published in Burlington, N. J., and now in Philadelphia, will with the present month appear as a weekly journal, instead of a monthly. It will continue under the same editorial supervisors that have heretofore given it its excellence, and we wish it a continued success.

—A writer to the *Druggists' Circular* states the number of apothecaries and physicians in the United States to be as follows:

The whole number of apothecaries and druggists at the time of the census of 1850, was 6,139; which was a proportion of 1 to 3,766 inhabitants. I find that in the District of Columbia the number of apothecaries and druggists was 48, and the population 51,687; being 1 apothecary to every 1,076 inhabitants. In New York, 1,082 apothecaries; or 1 to 2,862. Pennsylvania, 1,618; or 1 to 1,429. North Carolina, 34; or 1 to 25,557. Vermont, 19; or 1 to 16,532. Massachusetts, 509; or 1 to 1,747. Virginia, 160; or 1 to 8,885. I find that North Carolina affords the greatest proportion of population to druggists; District of Columbia the least; and Arkansas the next greatest to Vermont, which is next to North Carolina.

I find also the whole number of physicians to have been 40,481. Proportion as follows: New York, 1 to 610; Pennsylvania, 1 to 561; Massachusetts, 1 to 605; North Carolina, 1 to 802; Ohio, 1 to 465; District of Columbia, 1 to 406. In Maine the greatest proportion of population to physicians, viz: Physicians, 1 to 884, and California, 1 to 147. The average is 1 physician to every 571 inhabitants.

—DR. S. W. GROSS has become associated with his father, Prof. S. D. GROSS, in the editorial conduct of the *N. A. Medico-Chirurgical Review*.

—We have received the *Physicians' Visiting List for 1859*, from Messrs. Lindsay & Blakiston, Philadelphia. Its usefulness is too well known to require a more extended notice from us. Those who have used it will not fail to do so again, and those who have not will immediately perceive the great merits of this pocket companion, day-book and ledger.

—*The Nashville Monthly Record of Medical and Physical Science* is the title of a new medical journal, the first number of which appeared in September. It is edited by Daniel F. Wright, M.D., and Richard O. Currey, M.D., both Professors of Shelby Medical College, Nashville, Tennessee. Dr. Wright was formerly editor of the *Memphis Medical Recorder*, and Dr. Currey of the *Southern Journal of Medical Science*. These are discontinued, and their resources united in the new journal, the first number of which gives a good earnest of a valuable addition to our medical periodical literature. Nashville now issues two medical journals, and, by the establishment of the Shelby Medical College, has two medical colleges.

—The article on *Aneurism of the Axilla*, by DR. BONTECOU, which appears in this number of the MONTHLY, has already been partially published in the State Transactions. It having, however, in a great measure been re-written by the author, and much new matter added, we have thought it right, with this acknowledgment, to place it among our original communications.

Books and Pamphlets Received.

A Manual of the Practice of Medicine. By T. H. Tanner, M. D., F. L. S., &c. First American, from the Third Revised and Improved London Edition. Philadelphia, Lindsay & Blakiston. New York, S. S. & W. Wood, 1858.

The Transactions of the New Hampshire Medical Society—Sixty-eighth Anniversary; held at Concord, June 1st and 2nd, 1858. Manchester, 1858.

The Physicians' Visiting List, Diary, and Book of Engagements, for 1850. Philadelphia, Lindsay & Blakiston.

Annual Report of the Superintendents of the Poor of Kings County, for the year ending July 31, 1858.

Physiology, Pathology, and Therapeutics of Muscular Exercise. A paper read before the Cook County Medical Society. By W. H. Byford, M. D. Chicago, 1858.

Tilden and Company's Book of Formulæ. New Lebanon, N. Y., 1858.

The Annual Address delivered before the Connecticut Medical Society, and the Citizens of Waterbury, at Waterbury, May 26, 1858. By Benjamin Hopkins Catlin, M. D., President. Hartford, 1858.

The Half-Yearly Abstract of Medical Sciences. Edited by W. H. Ranking, M. D., &c. Philadelphia, Lindsay & Blakiston.

The Liverpool Medico-Chirurgical Journal, Nos. 1 to 4. 1857-8.

The Uremic Convulsions of Pregnancy, Parturition, and Childbed. By Dr. Carl R. Braun, Professor of Midwifery, Vienna. Translated from the German, with notes, by J. Matthews Duncan, M. D., F. R. C. P. E., Lecturer on Midwifery, &c. New York, S. S. & W. Wood, pp. 182, 75 cents.

Announcement of Lectures in Atlanta Medical College, for the session of 1859.

The American Homœopathic Review. Edited by Roger G. Perkins, M. D., and Henry M. Smith.

Annual Address delivered to the Graduates of the Atlanta Medical College, at the Commencement, September 2, 1858. By Curtis B. Nottingham, M. D., of Macon, Ga.

Notice—Our subscribers will please notice that the Office of Publication of the MONTHLY has been removed to No. 12 Clinton Place, to which address they will hereafter send their communications.

—We would respectfully call upon all those who are in arrears for 1857, and those whose subscriptions are not paid up for the present year, to answer our request for payment made in a previous number.